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ABSTRACT

This study is designed to provide more comprehensive information on Soviet higher learning emphasizing its increasingly close alignment with Soviet national planning and economy. Following introductory material, Soviet curriculums in higher education and schools and statistics are reviewed. Highlights include: (1) A major development in Soviet higher education is the increase in "production practice," in line with Soviet educational reforms initiated in 1958; (2) The pattern of supervision of Soviet higher education in conformity with the Soviet concept that education must be "linked with life;" (3) Soviet higher education has no equivalent to liberal arts education; (4) The "plant-higher technical school" is also a new development in Soviet higher education; and (5) Part-time education, including evening and correspondence study, is the principal type of higher education in the U.S.S.A. Appendices are included. (Author/MJM)

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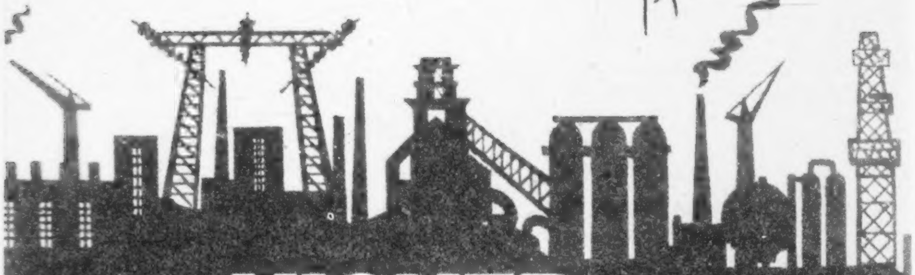

HIGHER EDUCATION in the U.S.S.R.

CURRICULUMS, SCHOOLS, AND STATISTICS

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Office of Education

HIGHLIGHTS

A major development in Soviet higher education is the increase in "production practice," in line with Soviet educational reforms initiated in 1958. This is a form of on-the-job training which is incorporated into the higher education curriculums, and in teacher, medical, and technical training.

* * *

The pattern of supervision of Soviet higher education is in conformity with the Soviet concept that education must be "linked with life." It tends to develop higher schools that are responsive to short-range state economic and cultural plans, and to various shifts in the needs as defined by operating economic agencies of the State.

* * *

Soviet higher education has no equivalent to liberal arts education. Even the 39 Soviet universities, which enroll only about 10 to 15 percent of the total student body in higher schools, are concerned with the production of specialists. The current Soviet 7-year plan, for example, calls for almost doubling the number of engineering graduates during the 1959–65 period as compared with the preceding 7-year period.

* * *

The "plant-higher technical school" is also a new development in Soviet higher education. These schools, first established in 1960, are located within and are a part of major Soviet industrial plants. Their courses, combining regular studies with factory and specialized training, extend from 6 months to a year beyond the regular higher schools.

* * *

Part-time education, including evening and correspondence study, is the principal type of higher education in the U.S.S.R. Over 40 percent of Soviet higher students are in special correspondence programs, which have been the major source of increased enrollments in Soviet higher education for the past decade.

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HIGHER EDUCATION in the U.S.S.R.

CURRICULUMS, SCHOOLS, AND STATISTICS

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Foreword

The demand for basic information on Soviet higher education continues to grow. American comparative educators and teachers in the humanities, social sciences, and sciences, express the need for specific information on Soviet curriculums. American scholars, visiting the U.S.S.R. in increasing numbers, desire information on the higher educational institutions located in the cities on their itineraries, and specifically on the schools in which their own specialties are taught. Perhaps the greatest interest is indicated in current Soviet educational statistics on secondary and higher education enrollments; graduation of scientists, doctors, teachers, and engineers; on size of teaching staffs; and the Soviet educational budget.

Previous bulletins on Soviet education published by the Office of Education have either been overall surveys (Education in the U.S.S.R., Bulletin 1957, No. 14; Soviet Commitment to Education, Bulletin 1959, No. 16) or studies of general elementary, secondary and teacher education (Soviet Education Programs, Bulletin 1960, No. 17). The present study is designed to help meet the demand for more comprehensive information on Soviet higher learning, and particularly, its increasingly close alignment with Soviet national planning and economy.

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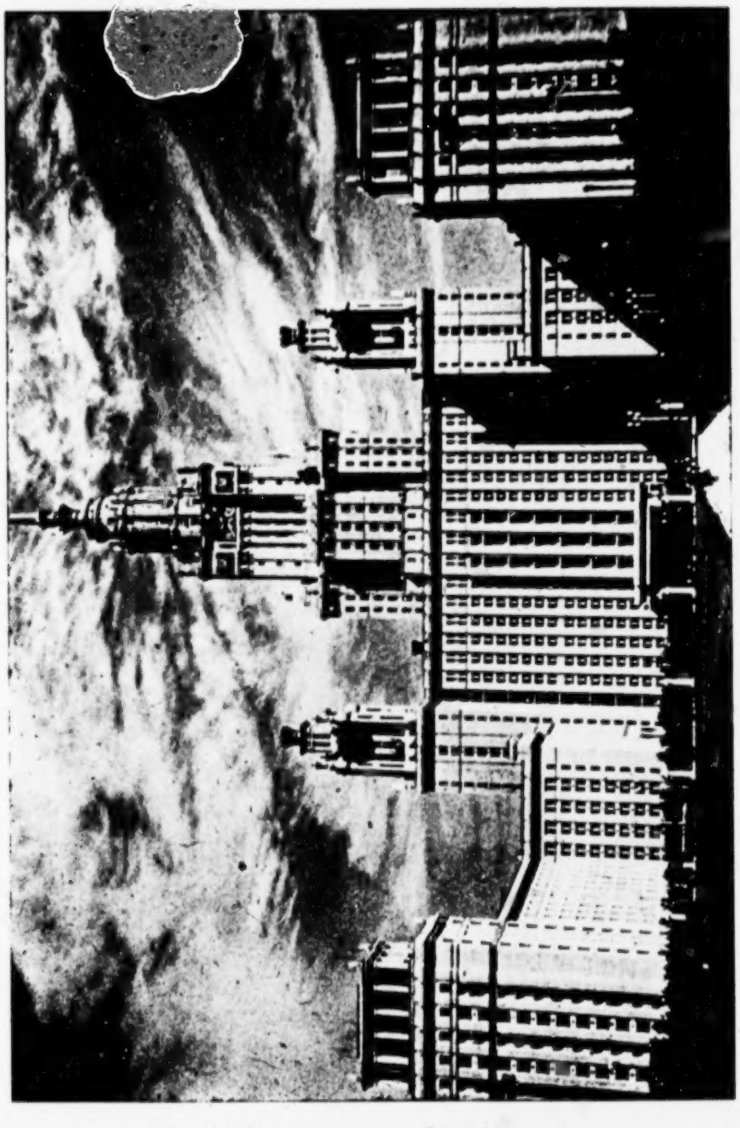

Main building of Moscow State University

(For administrative structure of University, see p. 72, 73.)

INTRODUCTION

Review of Reform Implementation in Soviet Higher Education

The Soviet education reform law, "On Strengthening the Ties Between School and Life and on Further Developing the System of Public Education in the U.S.S.R.," was enacted by the U.S.S.R. Supreme Soviet in December 1958. Corresponding laws were issued by each of the 15 union-republics the following spring.

The laws called for revision of the curriculum in schools of general education to include substantial "polytechnical" education; that is, to teach the fundamentals of industrial and agricultural production, increase practical training courses in schools, and provide further training in factories and on farms. "Schools of general education," the 7-year incomplete secondary (grades 1–7) and the 10-year complete secondary (grades 1–10) were to be transformed respectively into 8-year and 11-year "general education labor-polytechnical schools with production training." Universal, compulsory education would extend through grade 8. Complete secondary education, grades 9–11, would be obtained in either the new 11-year general education-polytechnical schools, evening schools of general education for working and rural youth, or in secondary specialized schools or *tekhnikums*, all of these providing access to higher education.

The laws provided, however, that up to 80 percent of students completing secondary education would be expected to work for 2 years or more, prior to entering institutions of higher education (VUZy). Their acceptance would be based not only upon their secondary school performance and higher entrance examinations, but also upon recommendations of the Communist Party, *Komsomol* (Communist Youth

Group), appropriate trade union, and of the factory or other supervisors for whom they had worked.

The remaining graduates, those admitted directly from secondary to higher schools, would be the most talented students, generally in scientific and technical fields.

Higher education in the Soviet Union would thus involve a substantial increase in practical training related to a student's specialty, and in correspondence and part-time evening education. The reform also called for wider dispersal of higher education institutions, which are concentrated in the largest cities of European U.S.S.R., throughout the country.

Some reform progress was indicated in a July 1962 resolution of the Supreme Soviet of the Russian Soviet Federated Socialist Republic (R.S.F.S.R.), the largest republic of the U.S.S.R., devoted to "the fulfillment of the law on strengthening the ties between school and life and further development of the system of public education in the R.S.F.S.R." The 1962 resolution noted that in this third year of implementation of the reform, 80.5 percent of the students finishing the seventh grade were going on to the new eighth grade classes; two-thirds of the general secondary 10-year schools had been reorganized into general-polytechnical 11-year schools; and over 60 percent of the youth admitted to regular daytime higher schools had 2 or more years of production training.

At the same time, the resolution noted various "serious defects" in fulfillment of the law, such as the lack of equipment for practical training of youth in the schools and the indifference of industrial enterprises and collective farms providing this training. Other Soviet reports have complained, in addition, that training for secondary school students in the fundamentals of production is bypassed, and that students are given only simple menial tasks to perform.

Is the 1958 education reform, the first such major reform in the Soviet Union since the early 1930's, a success or failure?

Since enactment of the school reform laws, a succession of conferences of Communist Party, Soviet Government, and education officials have charted advances and problems in implementation of the reform, and have issued directives and passed resolutions aimed toward its further progress. While insufficient time has elapsed to provide a definitive answer as to the success of the reform, the tenor of the conferences, as reported in Soviet publications intended for internal consumption in the U.S.S.R., would suggest that the reform is a qualified success, with considerable progress made toward its goals but with many major problems unresolved. That education officials were working hard to make the reform a success was clearly indicated at the conferences held.

Appraisals of Reform Progress

Higher Education Conference

A 4-day "All-Union Conference of Higher School Workers" was held in Moscow in July 1961 to make a first major appraisal of the reform's progress at the higher education level.[1] The conference, sponsored jointly by the Communist Party of the Soviet Union (C.P.S.U.) Central Committee and the U.S.S.R. Council of Ministers, was attended by over 2,000 officials. They included rectors (presidents) of all the higher schools, representatives of the Party, trade union and *Komsomol* organizations in these schools, industrial and agricultural officials, and union and republic government ministry officials.

An entire issue (August 1961) of the official monthly organ of the U.S.S.R. Ministry of Higher and Secondary Specialized Education, *Vestnik Vysshei Shkoly,* was devoted to major speeches given at the plenary sessions and to reports of various working sections of the conference.

The major conclusions expressed by participants in these sections, paraphrased and condensed, follow:

Technical Education

Where factory managers are concerned with student workers' production training goes well. The organization of work for students, however, is not easy.

Since the reform, student diploma projects are much more realistically geared to industry.

An analysis at the Kiev Polytechnical Institute indicated that textbooks for less than half the courses (72 out of 160) are up to date.

The eastern regions of the U.S.S.R. suffer a sharp deficit of professors and qualified scientific personnel to train engineers. This problem is being solved by setting up "science cities" in the east, consisting of a cluster of scientific research institutes and an allied university. The first of these was founded in Novosibirsk in 1959, and others are planned for Irkutsk, Kemerovo, and elsewhere.

University Education

The quality of graduates from different schools is uneven, and effort should be made to raise the majority of higher schools to the level of the leading ones in the next 10 to 15 years.

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[1] For an analysis of the first 2 years of the reform, see "Current Reform Trends in Soviet Higher Education 1959-60," by Peter H. Juviler, in Comparative Education Review, vol. 4, No. 3, February 1961.

The Soviet Union is in a leading position in the world in many branches of science, technology, and culture. This means that in the near future, the U.S.S.R. should break new ground in solving fundamental problems in these fields.

University scholars must be attracted in great number as participants in complex research projects, and the majority of higher schools must be made strong scientific centers.

Agricultural Education

Two years of reform indicate that the union of theory and practical work is giving positive results.

At the Moscow Agricultural Academy 80 percent of the students accepted have previously worked or served in the army for 2 years; 35 percent have worked in fields related to their higher education specialties. In the zootechnical faculty, for example, students had worked as milkmaids, swineherds, chicken breeders, and zootechnicians.

It is necessary to raise the level of scientific and theoretical education of agricultural specialists. Construction of educational and living facilities at agricultural institutes must be substantially improved.

Pedagogical Education

Reform work in this field has been fruitful. Pedagogical students perform socially useful labor by practice teaching, assisting teachers in kindergartens, regular schools, and boarding schools, and supervising student circles and pioneer groups. Students who will teach sciences perform production practice in factories and agrobiological stations.

At the pedagogical institutes, the theoretical level of many lectures is defective, particularly in the field of pedagogy, because of the unsatisfactory staff situation. At the Kiev Institute [presumably typical] only 27.5 percent of the teachers have scientific [graduate] degrees and titles.

In connection with the reform law, new departments are being organized in pedagogical schools to train teachers in the fundamentals of technology and production.

Conferences on Special Problems

Following the broad-range discussions of the July 1961 higher education conference, national and regional meetings were held on various special problems of the reform law: teaching and research, social sciences, and foreign languages.

C.P.S.U. Goals for Teacher Training

In September 1961, the C.P.S.U. Central Committee and the Council of Ministers passed a joint resolution for meeting a teaching shortage at the elementary-secondary level, one which is not apparent in examination of Soviet published statistics, and appears to result from the growth of the school system under the reform and increasing pupil enrollments. Temporarily retreating from the goal of 4-year higher teacher training for all primary school teachers, the resolution called for selection in the next 2 years, of the best secondary school graduates to receive 1 year's special training. After beginning teaching, the graduates of these 1-year special courses might continue training in correspondence divisions of pedagogical institutes.

At the same time, enrollments in regular pedagogical institutes were to be substantially increased, and persons having a higher education in other fields could enter teaching by taking the fourth year of study in pedagogical institutes.

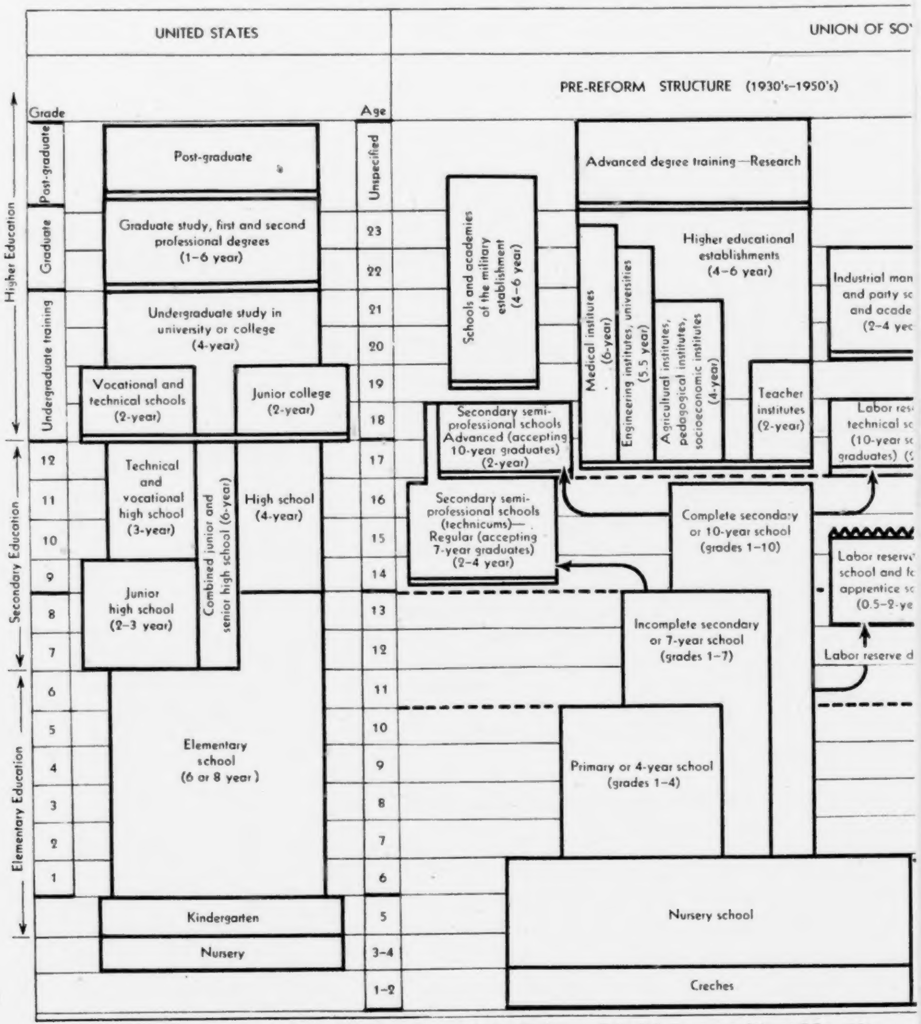
That the need for training substantially greater numbers of teachers would continue for some time, was evident from the education expansion goals set by the Communist Party program adopted at the 22d C.P.S.U. Congress in October 1961. The program stated:

> In the next decade compulsory secondary general and polytechnical 11-year education is to be introduced for all children of school age, and 8-year education for young people engaged in the national economy who have not had the appropriate schooling; in the subsequent decade everyone will have the opportunity to receive a complete secondary education . . . [there will be] a considerable expansion of the network of all types of general schools, including evening schools, which provide a secondary education in off-work hours.

Training for Specialized Research

The training of scholars and research personnel for higher schools and specialized research institutes was reviewed in a Central Committee-Council of Ministers' resolution of May 1962. The resolution chiefly pertained to methods of improving the quality of professional research personnel and research work. It referred to the substantial increase in the number of scientific workers in the U.S.S.R., important areas of success, and to recent qualitative improvements in research and practice. The resolution noted that tasks of further developing science and engineering demanded considerable improvement in the selection and training of professional personnel: Scientific workers were not being prepared fast enough; a certain number of dissertations submitted for academic degrees, and for which degrees had been granted, had no essential scientific or practical significance; and most graduates did not defend their dissertations within the established period.

CHART I.—PRE- AND POST-REFORM STRUCTURE OF THE SOVI


UNITED STATES
UNION OF SO
PRE-REFORM STRUCTURE (1930's–1950's)
Grade
Age
Higher Education
Secondary Education
Elementary Education
Post-graduate
Graduate
Undergraduate training
Post-graduate
Graduate study, first and second professional degrees (1–6 year)
Undergraduate study in university or college (4-year)
Vocational and technical schools (2-year)
Junior college (2-year)
Technical and vocational high school (3-year)
Combined junior and senior high school (6-year)
High school (4-year)
Junior high school (2–3 year)
Elementary school (6 or 8 year)
Kindergarten
Nursery
Unspecified
23
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21
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14
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9
8
7
6
5
3–4
1–2
Schools and academies of the military establishment (4–6 year)
Advanced degree training—Research
Higher educational establishments (4–6 year)
Medical institutes (6-year)
Engineering institutes, universities (5.5 year)
Agricultural institutes, pedagogical institutes, socioeconomic institutes (4-year)
Teacher institutes (2-year)
Industrial man and party sc and acade (2–4 yea
Secondary semi-professional schools Advanced (accepting 10-year graduates) (2-year)
Secondary semi-professional schools (technicums)— Regular (accepting 7-year graduates) (2–4 year)
Labor res technical sc (10-year sc graduates) (
Complete secondary or 10-year school (grades 1–10)
Labor reserve school and fa apprentice sc (0.5–2-ye
Incomplete secondary or 7-year school (grades 1–7)
Labor reserve d
Primary or 4-year school (grades 1–4)
Nursery school
Creches

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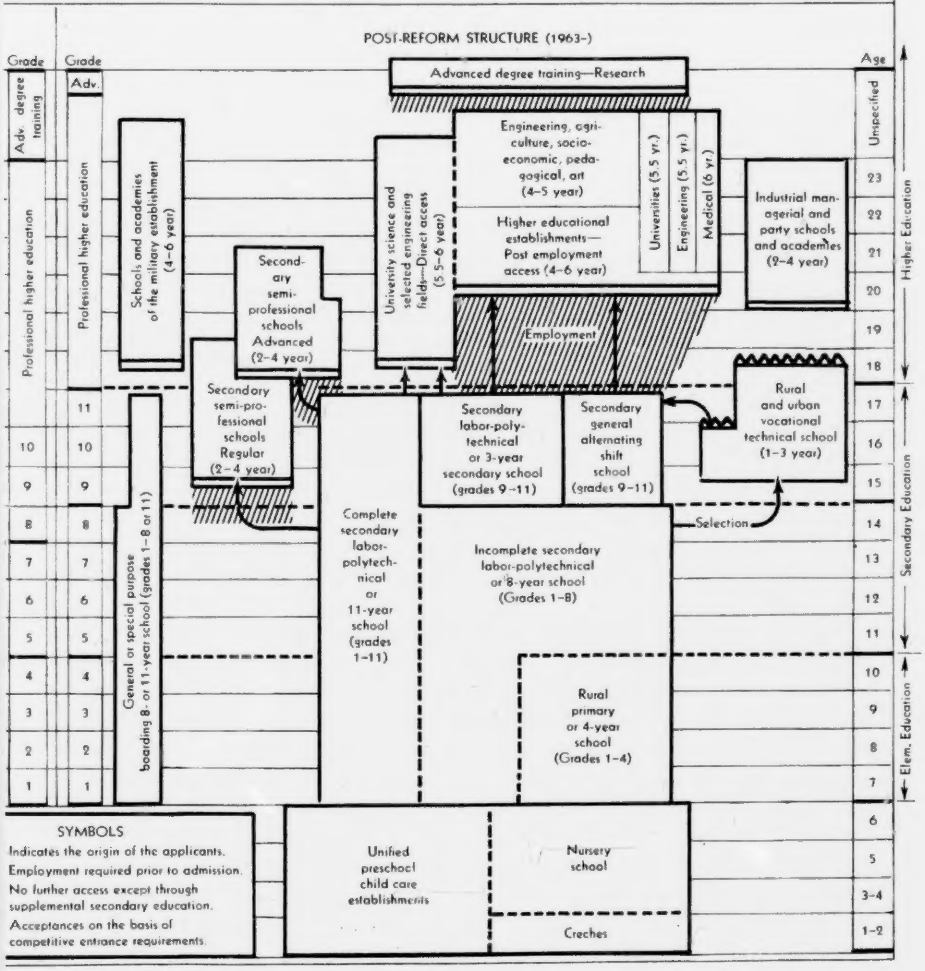
[1] Dewitt, Nicholas. *Education and Professional Employment in the U.S.S.R.* Washington, D.C.: U.S. Government Printing Office, 1960

)UCATIONAL SYSTEM, COMPARED WITH UNITED STATES [1]

CIALIST REPUBLICS


POST-REFORM STRUCTURE (1963-)
Grade
Grade
Age
Adv. degree training
Professional higher education
Adv.
Professional higher education
Schools and academies of the military establishment (4-6 year)
Advanced degree training—Research
Engineering, agri-culture, socio-economic, peda-gogical, art (4-5 year)
Higher educational establishments—Post employment access (4-6 year)
Universities (5.5 yr.)
Engineering (5.5 yr.)
Medical (6 yr.)
University science and selected engineering fields—Direct access (5.5-6 year)
Second-ary semi-professional schools Advanced (2-4 year)
Industrial man-agerial and party schools and academies (2-4 year)
Employment
Rural and urban vocational technical school (1-3 year)
Secondary semi-pro-fessional schools Regular (2-4 year)
Secondary labor-poly-technical or 3-year secondary school (grades 9-11)
Secondary general alternating shift school (grades 9-11)
Selection
Complete secondary labor-polytech-nical or 11-year school (grades 1-11)
Incomplete secondary labor-polytechnical or 8-year school (Grades 1-8)
General or special purpose boarding 8- or 11-year school (grades 1-8 or 11)
Rural primary or 4-year school (Grades 1-4)
Unified preschool child care establishments
Nursery school
Creches
Unspecified
23
22
21
20
19
18
17
16
15
14
13
12
11
10
9
8
7
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3-4
1-2
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6
5
4
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2
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5
4
3
2
1
Higher Education
Secondary Education
Elem. Education
SYMBOLS
Indicates the origin of the applicants.
Employment required prior to admission.
No further access except through supplemental secondary education.
Acceptances on the basis of competitive entrance requirements.

To improve the selection of researchers, young specialists with higher education would be included in staffs of scientific research institutes and higher schools to serve a 2-year probationary period, after which only acceptable specialists would be retained.

The resolution further stipulated, in an apparent effort to weed out scholars of diminishing capability, that supervisory positions in higher schools and research institutes may not be occupied by persons over 65 years old. Doctors of science and professors who were of pension age could be transferred to the position of "senior scientific associate, consultant," in which they would primarily train scientific personnel.

Finally, the system of selection and approval of graduate student dissertations would be tightened up, in a system of review by scientific and academic councils of research institutes and higher schools, and by the Higher Certification Commission of the U.S.S.R. Ministry of Higher and Specialized Secondary Education.

Social Science Conference

Developments in teaching and research in the social sciences was the subject of a 4-day "All-Union Conference of Heads of Social Science Chairs," held in Moscow in February 1962. In sheer number of participants, over 2,600, this conference was even larger than the general higher education conference of the preceding July. Top Communist Party and government officials participated, as well as educators.

As in any Soviet discussions on the subject, success in teaching and research in various fields which are considered as social sciences in the U.S.S.R., such as "Historical and Dialectical Materialism," "History of the Communist Party of the Soviet Union," and "Political Economy," was equated with success in transmitting Communist dogma and developing a "Communist consciousness" in students: World developments, events within and between countries, were to be viewed in terms of this Communist ideology. The program of the 22d C.P.S.U. Congress, which calls for the propagation of the great advantages of communism over the declining capitalist system, was to be carefully studied and applied.

Revisions of textbooks and courses of study which, it was acknowledged, for years had been distorted by the "cult of Stalin's personality," were continued and new textbooks in the social sciences were being introduced.

Foreign Language Teaching

The teaching of foreign languages was the subject of an interhigher school conference held at the Moscow Pedagogical Institute in January 1962. About 250 foreign language teachers from 60 cities throughout the U.S.S.R. were reported to have participated. The specific topic of discussion was foreign language-teaching reform in line with a May 1961 resolution of the U.S.S.R. Council of Ministers. That resolution stated that foreign languages are studied in all Soviet higher and secondary specialized educational institutions, in general education secondary school, and in almost all incomplete secondary schools. At the same time, it noted that most persons completing secondary general and specialized schools and higher educational institutions have a poor knowledge of a foreign language and cannot translate a foreign text without the aid of a dictionary: Use of the spoken foreign language is especially weak.

In its resolution, the U.S.S.R. Council of Ministers directed the councils of ministers of the union republics, and the various ministries and departments having charge of educational institutions, to eliminate the shortcomings in foreign language instruction and to improve the means for foreign language study in the secondary and higher schools. The resolution called for at least 240 hours of compulsory foreign language classes at most higher schools; organization of 2-year pedagogical courses at a number of universities and pedagogical institutions to train highly qualified language instructors for higher schools; and compulsory advanced training for foreign-language teachers with insufficient training.

In apparent reaction to mounting criticism of the prevailing emphasis in foreign language instruction on the rules of grammar and of the current system of reading and translation from texts, the 1962 inter-higher school conference stressed the need of teaching techniques, course organization, and audiovisual equipment to support increasing use of the oral-aural approach.

Soviet Education and National Goals

The pattern which emerges from analysis of these major conference discussions and resolutions is one of constant pressure by the Communist Party and government leadership to move Soviet education in the desired political, economic, social and cultural direction, in conformity with the 1958 reform law. It denotes great effort on the part of the educational community to meet the demands placed on it, and progress through a national system of criticism, self-criticism, and constant review. It is a system which may be called "exegesis"—that is, the word comes down from above, to be discussed, interpreted, elaborated, and implemented. It is a system in which education is linked to national goals and is given substantial State support. A prominent feature of this support in higher education is free tuition for all students and stipends for most.

The confidence of the Soviet State in the strength of its reformed system of higher education was apparent, for example, in the September 1962 international symposium held in Moscow, attended by about 200 foreign and 100 Soviet educators. The symposium was a manifestation of the increasing Soviet drive to export its system of higher education and ideas, and of the apparent intention of Soviet leaders that the role of Soviet higher education in the international as well as the domestic field should continue to grow.[2]

In the extensive review of the reform's implementation during the past 4 years, a basic problem which may determine the ultimate success or failure of the reform is rarely discussed. At both the secondary and higher education levels, the programs of studies attempt to combine a great increase in practical training with a substantial regular academic program. Despite the extension of secondary education by a year and of higher education by varying amounts according to specialty, the total work load on the student in each school year is heavier than the already heavy load placed upon him prior to the reform. The problem is whether the energies and interests of students can be maintained for both regular studies and production training. Can the quality of the academic program be sustained after the reform is fully implemented, or will the "connection of school with life" be successful in giving the students a practical orientation at the expense of fundamental knowledge?

It is suggested here that there are elements in the reform that, unless carefully balanced, could undermine the academic structure of the educational system. A single-minded pursuit of the national goals of polytechnical education and production training and of education "without interrupting production" may have the effect of diminishing the system's capability of maintaining the caliber of general secondary education and of training highly qualified specialists in higher education.

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[2] Two recent reports by the author on this subject are "The Peoples' Friendship University in the U.S.S.R." and "Soviet Training Programs for Africa," both in the Studies in Comparative Education series of the U.S. Office of Education.

PART I

Soviet Curriculums in Higher Education

Content and Requirements

Soviet objectives in higher education are reflected in the content and requirements of higher education curriculums. These objectives, as translated into currently effective Soviet law, have been stated in the *Pedagogicheskii Slovar* (Pedagogical Dictionary), published in Moscow in 1960 by the Russian S.F.S.R. Academy of Pedagogical Sciences:

> By the law on strengthening the connection of schools with life and on further development of the system of national education in the U.S.S.R., the chief requirements of higher school are:
>
> Training of highly qualified specialists, educated in the fundamentals of Marxist-Leninist teachings, mastering the latest achievements of domestic and foreign science and technology, capable not only of utilizing contemporary technology but creating the technology of the future;
>
> Fulfillment of scientific-research work, meeting the requirements of Communist construction, training research and teaching personnel, raising the qualifications of specialists working in various branches of the national economy, culture and education, and dissemination of scientific and political knowledge [Communist indoctrination] among the workers.

The procedures for development and control of Soviet higher education curriculums are stated in decrees of the U.S.S.R. Council of Ministers. One of the chief responsibilities of the Soviet Higher Education Ministry is "the improvement of study plans and programs of higher educational institutions." The Administration of Teaching Methods in the Ministry prepares curriculums for Soviet higher schools. Some curriculums for higher education specialties, such as education, medicine, and art, are drafted respectively by the ministries of education, health, and culture, while other educational institutions set up their own curriculums. In practice, all curriculums, regardless of the agency or educational institution formulating them, are confirmed by the U.S.S.R. Ministry of Higher and Specialized Secondary Education. A decree on the subject (November 2, 1955, No. 1859) states that the Higher Education Ministry "approves the academic plans and programs of higher educational institutions (except the programs for special disciplines for higher educational institutions of other ministries and departments)."

Structure of Curriculums

The structural components of Soviet higher education curriculums are described in the most recent Nicholas DeWitt study[1] as follows:

1. Study schedule (*grafik uchebnogo protsessa*)—outlines the instruction activity during each of the 52 weeks of a calendar year. It includes:
    - a. Instruction (*teoreticheskoe obuchenie*)—usually encompasses up to 34 weeks in a calendar year. The term "instruction" covers all activities in which students engage, as a group, in face-to-face contact with the faculty—lectures (*lektsii*), laboratory work (*laboratornye zaniatiia*), seminars (*seminary*), group or section work (*praktikumy*); also, course assignments and projects (*kursovye roboty i proekty*).[2] It does not include preparation of theses [diploma work], their defense, or State examinations.
    - b. Examinations (*ekzamenatsionnaia sessiia*)—are conducted at the end of the spring and winter terms over a period of about 7 weeks.
    - c. Study practice assignment (*uchebnaia praktika*)—lasts from 2 to 6 weeks and may be conducted as a separate or simultaneous assignment while the student is engaged in other instruction activities.
    - d. Industrial [Production] practice (*proizvodstvennaia praktika*) job assignment, which is a separate requirement. It consists of several assignments, which may involve a total of 50 weeks.
    - e. Thesis or diploma project (*diplomnyi proekt*) and/or state examinations (*gosudarstvennye ekzameny*)—in some fields both are required; in others, only one. Thirteen to 18 weeks during the final year of study are allowed for this activity.
    - f. Recesses or vacation periods (*kanikuly*)—scheduled in January and in the summer.
2. Allocation of time (*svodnyi biudzhet vremeni*)—gives by total and by year of study, the number of weeks allocated to any given activity indicated above.
3. Curriculum proper, or plan of study (*plan uchebnogo protsessa*)—shows the total number of hours to be spent on each instruction subject by term and year, according to the method of instruction (lecture, laboratory, seminar, practice session). It also lists the terms in which students take final examinations and which type is required—graded examination (*ekzamen*) or qualifying [test or] examination (*zachet*). The former has four descriptive grades: excellent, good, average, or failing. The latter is simply either passed or failed.

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[1] *Education and Professional Employment in the U.S.S.R.*, Washington, D.C.

[2] Also included are practical studies (*prakticheskie zaniatiia*).

4. Optional courses (*fakul'tativnye distsipliny*)—are courses students may take if they desire, in addition to the subjects required in the curriculum.
5. Practice assignments—describe the type and give the dates for on-the-job assignments, consisting of industrial [production] practice and/or teaching practice, or other practice assignment.
6. State examinations and diploma project—states when and in which subjects examinations are scheduled and the due date and place of performance of the diploma project.
7. Specialized courses (*perechen' spetsial'nykh distsiplin*)—lists the subjects required for a specialty. Some specialized courses must be taken by all students; other courses are electives, called "choice courses" (*kursy po vyboru*). The student may take as many electives as are allowed by the time allocated in the curriculum specifically for this purpose.
8. Explanatory notes—give various detailed instructions as to specialization options, maximum loads, and additional practice assignments for specializations; also indicate when students are to be assigned to specialization groups, and which courses may be added or dropped by decision of the academic council or an institution or its departments.

Common to all curriculums for Soviet students in higher education are the three required courses in Communist ideology: History of the Communist Party of the Soviet Union, Political Economy, and Dialectical and Historical Materialism. An average of about 15 percent of every Soviet higher education curriculum is devoted to these courses. Their syllabuses have been translated into English and published in the University of Michigan's *Administration of Teaching in Social Sciences in the U.S.S.R.*, Ann Arbor, 1960. Hours in the required courses are shown:

Hours devoted to required courses in Communist ideology (out of total curriculum hours in higher education)

Specialty	3 required Communist ideology courses	Total curriculum (excluding optional courses)
	Hours	
Russian language and literature	500	3,908
History	574	3,954
Philosophy	844	4,540
Psychology	640	4,752
Law	660	4,138
Mathematics	510	4,482
Physics	514	4,781
Chemistry	510	4,525
Biology	500	4,351
Economics of national economy	660	3,620
Therapeutics	390	6,775
Pediatrics	390	6,814
Pedagogy and methods of primary education	390	4,318
Other podagogical institute courses	510	3,171 to 4,974
Engineering—technical courses	390	4,700 to 4,780

The length of higher education studies ranges from 4 years for teachers of the primary grades to 6 years for physicians, most courses requiring 5 years. A diploma of specialization is awarded upon completion of the curriculum, a diploma project, and passing the state examinations.

Graduate Program

The graduate program (*aspirantura*), which generally requires 3 years of training and research beyond the diploma, the passing of examinations, and the public defense of a dissertation, leads to the degree of candidate of sciences (*kandidat nauk*). Since programs are individualized, no standardized curriculums are published. The degree is also awarded to assistant, associate, and full professors and to senior research associates who pass examinations and defend dissertations without formal *aspirantura* training. The *aspirantura* is given not only at higher schools, but also at scientific research institutes under the jurisdiction of: (1) U.S.S.R. and republic academies of Science; (2) Soviet government ministries, administrations and committees, including industrial ministries and the State Planning Committee (*Gosplan*); and (3) other organizations, such as the U.S.S.R. Academy of Medical Sciences and the R.S.F.S.R. Academy of Pedagogical Sciences.[3] Graduate programs are closely integrated with scientific, industrial and other research projects assigned to state institutions, and the work of each graduate student (*aspirant*) fits into and is intended to support the overall research program of a given higher school or scientific institute. In 1961, 3,795 *aspirants* graduated from higher schools, and almost that number, 3,126, from *aspirant* programs in scientific research institutes.

The degree of doctor of sciences (*doktor nauk*) requires no specific program (the *doktorantura* was abolished in 1956) or specific period of preparation, but is awarded to a select number of individuals outstanding in given scholarly fields who make original contributions to an area of specialization. Considered a higher degree than the *kandidat nauk,* the *doktor nauk* may be awarded to those who already have a *kandidat* degree, or to those holding the rank of professor. The *doktor nauk* may also be awarded for work already performed or may be earned by preparation and defense of a doctoral dissertation.

Production Practice

The major development in the higher education curriculums is the increase in production practice, in line with the Soviet 1958 educational reforms. On the whole, Soviet production practice is a form of on-the-job training which is incorporated into the higher education curriculum, usually in the last semesters, with only a small part of the curriculum in those semesters devoted to formal study. The status of production practice in higher education is still evolving, because the nature and application of this training in specific programs has confronted Soviet educators with major problems not yet resolved.

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[3] For a detailed description of graduate training, including listings of graduate degree-granting institutions and disciplines in which degrees are granted, see *Aspirantura, Spravochnik dlia postupaiushchikh v aspiranturu i soiskatelei, uchenykh stepenei* (Graduate Program: Handbook for Graduate Program and Scientific Degree Candidates), published by the U.S.S.R. Ministry of Higher and Specialized Secondary Education, Moscow, 1960, 454 pp.

Information available from Soviet sources indicates in general the position of production practice in various fields of higher education:

University Training

In the university, the required period of studies in a given field of specialization, following completion of secondary education, has generally been 5 years. Since the 1958 reform, an additional semester has been added in some specialties to allow for expansion of practical training. V. P. Elyutin, U.S.S.R. Minister of Higher and Secondary Specialized Education, gave a general indication of the position of production practice in various curriculums in his major report to the national conference of higher education personnel held in Moscow in July 1961.[4]

He stated that production work linked to theoretical instruction had been introduced in the first year of study in the humanities. It is evident from specific curriculums, however, that the bulk of production work in the humanities and social sciences, as well as in scientific and technical fields, is reserved for the last semesters.

Minister Elyutin indicated the variety of institutions in which production training might take place:

> Proceeding from the requirements of the School Law, the universities have revised their curriculums so as to provide a substantial increase in practical training in laboratories, designing bureaus, research institutes at experimental stations, advanced enterprises, on state and collective farms, and at schools.

That considerable programing remains to be done in the production practice aspect of the university curriculum was suggested by Minister Elyutin:

> We must without delay begin defining and elaborating the methods for conducting the long periods of practice for the senior students in every specialty. For this we must reserve regular positions in production for the universities.[5]

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[4] This report, "The Higher School at a New Stage," published in *Pravda*, July 5, 1961, has been translated in Soviet Education, International Arts and Sciences Press, New York, January 1962. p. 35–36.

[5] *Ibid.*

Teacher Training

Pedagogical practice for teachers is the equivalent of production practice in other fields of Soviet higher education. Besides practice teaching, teachers in several specialties are required to participate in production practice in industrial enterprises, usually in the last semesters of the curriculum. The considerable increase in practical training for teachers in various specialties since the Soviet educational reform is seen in the number of weeks devoted to this activity in the 1959 curriculum, as compared with the immediate prereform curriculum of 1957.

The curriculums compared are those of the pedagogical institutes and higher schools devoted primarily to the training of secondary school teachers (grades 5–11). The total period of studies required for each given specialty, following completion of secondary education, has remained the same since the reform as it was in 1957: 4 years for physical education teachers and 5 years for others.

Number of weeks of pedagogical practice

Subjects	1957	1959
	Weeks	
Specialty:		
Russian language, literature and history	19	34
Foreign languages	19	34
Mathematics and physics:		
Pedagogical practice	16	34
Teaching-production practice	2	12
Geography and biology:		
Pedagogical practice	16	28
Teaching-production practice (summer field work in 1957)	13	28
Physical education:		
Pedagogical practice	17	38
Annual training camp and excursions	17	29

Diverse Soviet sources have verified this considerable increase in the time devoted to pedagogical practice. Minister Elyutin reported that "practice teaching for students has undergone a marked change. It is now allocated twice as much time as before." The head of the Faculty of Foreign Languages in the Kazakh Pedagogical Institute in Alma-Ata stated in October 1961 that the faculty's old curriculum called for 22 weeks of pedagogical practice, but that the current curriculum calls for 38 weeks.

Medical Training

In the U.S.S.R. this training is a 6-year curriculum at a higher medical institute, directly following completion of secondary education. From the limited information available on post-reform curriculums for the medical institutes, the precise amount of increase in practical training for doctors cannot be determined. In practice, it apparently varies from city to city. Minister Elyutin stated in his July 1961 report:

> Practical training has been considerably intensified at medical prophylactic and sanitary-hygienic institutions. The younger students now care for patients at clinics and hospitals, and senior students serve as medium-level medical personnel there. We must mention the successful work carried out by the hospital clinics of the First Leningrad and the Irkutsk medical institutes, which have taken over the complete polyclinical servicing of several medical districts. This has made it possible for every student to receive patients, visit them at home, and carry on dispensary work, prophylactic vaccination, anti-epidemic measures and enlightenment with respect to sanitation under the guidance of their physician teachers. The improvements made in the practical training of the medical students have facilitated the transfer of the study of parts of special courses to the clinics.

An indication of the postreform medical curriculum may be obtained from information on the course of instruction in pediatrics, appearing in the 1960 *Report of the Medical Exchange Mission to the U.S.S.R.*, Public Health Service Publication No. 954:

> During the first and second years the student takes 160 hours of the History of the Communist Party of the Soviet Union, 90 hours of Political Economy, and 140 hours of Dialectical and Historical Materialism. The first 2 years also require 220 hours of foreign language, which includes a course in Latin. During the first 2 years the following basic sciences are taught:[6]

	Hours
Physics	136 (40)
Biology	190 (104)
Human anatomy	392 (274)
History and embryology	182 (116)
Inorganic chemistry	140 (86)
Organic chemistry	295 (164)
Physiology	247 (115)
Microbiology	207 (137)

> During the third year pathology and theoretical materials of clinical subjects are emphasized as follows:

	Hours
Pathological physiology	155 (87)
Pharmacology	174 (106)
Pathology	188 (105)
Principles of internal medicine and radiology	229 (130)
General surgery	189 (102)
Operative surgical anatomy	102 (68)
Hygiene	185 (102)
Principles of pediatrics	121 (68)

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[6] Number in parentheses in all years indicates hours out of total for laboratory work.

The last 3 years of the program are devoted to clinical clerkship and to the presentation of didactic material in the clinical subjects and public health. A breakdown of the time devoted to the various subjects is as follows:

	Hours
Organization of health and welfare	124
Medicine	179
Surgery	167
Dermatology and venereal disease	96
Neurology	102
Pediatrics	191
Infectious diseases	140
Obstetrics and gynecology	229
Pediatric infectious diseases	332
Ear, nose, and throat	95
Opthalmology	85
Inpatient medicine	140
Inpatient pediatrics	464
Inpatient surgery	210
Pediatric surgery and orthopedics	170
Psychiatry	95
Legal medicine	85

During the last two summers of schooling the student spends 8 and 4 weeks respectively doing practical medical work in a nonacademic setting.

Technical Training

Production practice in technical fields is concentrated in the last semesters in the university curriculums—such as the program in mechanics—but in the technical institutes, it appears to take place in the early and later semesters, with the bulk of formal study in the middle semesters. This pattern is suggested in Minister Elyutin's statements on technical education in his July 1961 speech, and was made more explicit by the head of the Physico-Mechanical Faculty at the Leningrad Polytechnical Institute in October 1961. He stated that the full course for students at the institute was then 5 years and 10 months; that the first year or two was devoted to production training combined with study; and that the third, fourth, and fifth years were spent exclusively in study. At the end of the fifth year the student received 1 month's "acquaintance" practice at an industrial plant, and in the sixth year he practiced full-time in the plant for 42 weeks.

A few current curriculums for engineering-technical higher schools have recently become available. The length of studies indicated for each specialty is 5 years and 4 months; the pre-reform curriculums had required 5 years. The new curriculums consistently require an increase in the number of hours devoted to practical training and to seminars and course projects.

References and Source Materials

Several recent publications provide substantive information on Soviet education at all levels, among which are:

Bereday, Veorge Z. F., Brickman, William W., and Read, Gerald H. *The Changing Soviet School.* Riverside Press, Cambridge, Mass., 1960.

DeWitt, Nicholas. *Education and Professional Employment in the U.S.S.R.* Washington, D.C.: U.S. Government Printing Office, 1961.

Medlin, William K., Lindquist, Clarence B., and Schmitt, Marshall L. *Soviet Education Programs.* Washington, D.C.: U.S. Government Printing Office, 1960.

A publication devoted specifically to higher education is I. N. Shumilin's *Soviet Higher Education,* published by the Institute for the Study of the U.S.S.R., Munich, in July 1962. A description of the Soviet system of higher education, by the U.S.S.R. Minister of Higher Education, V. P. Elyutin, is also available in English, published by Bookfield House, Inc., New York, in 1959.

The 21 curriculum tables in the appendixes are translations from the following sources:

Source A

Ministerstvo Vysshego i Srednego Spetsialnogo Obrazovaniia S.S.S.R., (Ministry of Higher and Secondary Specialized Education U.S.S.R.), *Uchebnye plany po universitetskim, ekonomicheskim i iuridicheskim spetsialnostiam (dnevnoe obuchenie)* (Study Plans for University, Economic and Juridical Specialties [Day Programs]), Moscow 1959.

Source B

Central Methodological Cabinet for Higher Medical Education, U.S.S.R., *Curricula of the Higher Medical Schools, Moscow, 1957,* published in English translation by the National Institutes of Health, U.S. Public Health Service.

Source C

Ministerstvo Vysshego Obrazovaniia S.S.S.R., Ministerstvo Prosveshcheniia R.S.F.S.R., (Ministry of Higher Education U.S.S.R., Ministry of Education R.S.F.S.R.), *Uchebnye plany pedagogicheskikh institutov* (Study Plans of Pedagogical Institutes), Moscow 1959.

Source D

Ministerstvo Vysshego i Srednego Spetsialnogo Obrazovaniia S.S.S.R. (Ministry of Higher and Secondary Specialized Education U.S.S.R.), "*Uchebnyi Plan, Spetsial'nosti 0201,*" "*Uchebnyi Plan, Spetsial'nosti 0807,*" and "*Uchebnyi Plan, Spetsial'nosti 1202*" (Individual, unbound study plans for engineering-technical specialties, number 0201, 0807, and 1202).

Source A contains curriculums for the following higher education specialties:

Language and Literature

- Armenian
- Azerbaidzhan
- Balkar
- Bashkir
- Belorussian
- Buriat
- Dagestan
- Eastern
- Estonian
- Georgian
- Kabardin
- Kazakh
- Kirgiz
- Latvian
- Lithuanian
- Moldavian
- Mordvin
- Romano-Germanic
- Russian
- Slavic
- Tadzhik
- Tatar
- Turkmen
- Ukrainian
- Uzbek
- Yakut

Science and Mathematics

- Astrogeodesy
- Astronomy
- Biology
- Cartography
- Chemistry
- Geochemistry
- Geography
- Geology
- Geophysical methods and prospecting
- Hydrogeology and engineering geology
- Hydrology of dry lands
- Mathematics
- Mechanics
- Meteorology
- Oceanography
- Physics
- Radiophysics and electronics
- Soil science and agronomy

Economics

- Accounting—2 plans
- Economics and planning of material-technical supply
- Economics of industry
- Economics of national economy
- Finance and credit—2 plans
- Planning of the national economy
- Science of staple commodities
- Statistics
- Economics and Organization of:
- Air transport
- Automobile transport—2 plans
- Chemical industry—2 plans
- Construction—2 plans
- Machine building industry—2 plans
- Mining industry—2 plans
- Municipal services—2 plans
- Power industry—2 plans

Other Social Science and Humanities

- Classical philology
- Foreign languages
- Historico-archives
- History
- Journalism
- Law—2 plans
- Philosophy
- Political economy
- Psychology

Source B contains curriculums for the following medical specialties:

- Pediatrics
- Pharmacology
- Sanitation and hygiene
- Stomatology
- Therapeutics

Source C contains curriculums for the following pedagogical specialities:

- Biology and chemistry
- Biology and fundamentals of agricultural production
- Drawing, mechanical drawing, and labor
- Foreign languages
- General technical disciplines and labor (for individuals lacking production experience)
- General technical disciplines and labor (for individuals with 2 years of production experience)
- Geography and biology
- Mathematics, mechanical drawing
- Mathematics and physics
- Pedagogy and methods of primary education
- Physical education
- Physics and chemistry
- Physics, electrotechnics and machine shop
- Russian language, literature, foreign language
- Russian language, literature, history

The major source for curriculums in the higher technical and agricultural fields may be found in a compilation published prior to the Soviet educational reform initiated in 1958:

Ministerstvo Vysshego Obrazovaniia S.S.S.R. (Minister of Higher Education U.S.S.R.), *Uchebnye plany po spetsialnostiam vysshikh tekhnicheskikh i selskokoziaistvennykh uchebnykh zavedenii* (Study Plans for Specialties of Higher Technical and Agricultural Educational Institutions), Moscow 1956.

APPENDIX A

Tables

Curriculums for State Universities

NOTE: The curriculum tables that follow for all Soviet institutions of higher learning were confirmed by the U.S.S.R. Ministry of Higher and Specialized Secondary Education for the year 1959, with the exception of medical curriculums, approved in 1955, and engineering curriculums, in 1961.

Table 1.—Specialty: Russian language and literature

[This 5-year curriculum is for the following specialists: (1) Philologist, teacher of Russian language and literature; (2) philologist, literary worker; or (3) philologist, library scientist, and bibliographer. Data from Source A. For full title applicable to this table and tables 2–21, see statement preceding the titles in the contents]

Subjects	Total	Total hours in program				Hours per week by year and by semester									
						1st year		2d year		3d year		4th year		5th year	
		Lectures	Laboratory work	Practical studies	Seminars	1st semester 18 weeks	2d semester 16 weeks	3d semester 18 weeks	4th semester 16 weeks	5th semester 18 weeks	6th semester 16 weeks	7th semester 14 weeks	8th semester 16 weeks	9th semester 18 weeks	10th semester 16 weeks
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Total hours	**3,908**	**2,114**	**1,140**	**410**	**244**	**16**	**16**	**32**	**30**	**32**	**30**	**36**	**16**	**24**	--------
1. History of C.P.S.U	220	140	--------	--------	80	3	3	3	4	--------	--------	--------	--------	--------	State examinations
2. Political economy	140	80	--------	--------	60	--------	--------	--------	--------	2	2	2	3	--------	
3. Dialectical and historical materialism	140	60	--------	--------	80	--------	--------	--------	--------	--------	4	2	3	--------	

4. History of philosophy	70	70												4	or diploma work.
5. Logic	70	44		26						4					
6. Foreign language	344		344			4	4	4	4	4					
7. Latin	104		104					4	2						
8. Psychology	54	36	18							3					
9. Pedagogy and its history	88	88									2	4			
10. Methods of teaching Russian language	60	30		30								2	2		
11. Methods of teaching Russian literature	60	30		30								2	2		
12. Introduction to linguistics	68	42	26			2	2								
13. General linguistics	72	60			12									4	
14. Old Slavonic language	68	32	36					2	2						
15. Study of Russian dialects	48	30	18						3						
16. History of Russian language	192	120	72							4	4	4			
17. Modern Russian language	424	144	200	80		2	3	6	6	4	4				
18. Practical stylistics of Russian language	56	12	44									4			
19. Introduction to literary research	72	40	32					4							
20. Theory of literature with fundamentals of Marxist-Leninist ethics	72	60			12									4	
21. Russian national folklore	54	36		18		3									
22. History of Russian literature	430	328	12	90			2	3	3	4	4	4	2	4	
23. Foreign literature (including ancient and literature of the East)	310	310				2	2	2	2	3	4	4			
24. Literature of the peoples of the U.S.S.R	92	92									2	2	2		
25. Special elective course	464	230	234					2	2	4	4	6	2	8	
26. Physical education	136			136				2	2						

CURRICULUM REQUIREMENTS (IN ABSOLUTE NUMBERS)

Number of standard calculations	12					5	5						2	
Number of course papers	3								1		1		1	
Number of examinations	30						4	3	4	4	4	4	3	4
Number of tests	32						3	5	5	5	4	4	4	2

Optional Subjects

[For all tables—number of hours not indicated]

1. Foreign language
2. History of U.S.S.R.
3. School hygiene
4. Extracurricular work
5. General history
6. Lexicography
7. History of Russian theater
8. History of art
9. Greek language
10. Expressive reading
11. Physical education
12. Sanskrit

Production practice

	Semester No.	Weeks
1. Production practice:		
a. in folklore	2	2
b. in study of dialects	4	2
c. pioneer work	6	4
2. Pedagogical practice in school	7	4
3. Production or pedagogical practice	8	16
4. Production practice in archives, in manuscript resources of libraries, et cetera	8	4
Total		32

Student may take either diploma work or State examinations:
1. History of C.P.S.U.
2. Modern Russian language.
3. History of Russian literature.
4. Methods of teaching Russian language and literature.

Table 2.—Specialty: History

[This 5-year curriculum is for the following specialists: (1) Historian, teacher of history and constitution; (2) historian, with title of specialization; or (3) teacher of history and constitution. Data from Source A]

Subjects	Total	Total hours in program				Hours per week by year and by semester									
						1st year		2d year		3d year		4th year		5th year	
		Lectures	Laboratory work	Practical studies	Seminars	1st semester 18 weeks	2d semester 16 weeks	3d semester 18 weeks	4th semester 16 weeks	5th semester 18 weeks	6th semester 16 weeks	7th semester 18 weeks	8th semester 16 weeks	9th semester 18 weeks	10th semester 16 weeks
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Total Hours	**3,954**	**2,436**	**24**	**1,224**	**270**	**16**	**16**	**27**	**32**	**32**	**32**	**32**	**16**	**24**	State examinations or diploma work and State examinations.
1. History of C.P.S.U	220	120			100	3	3	3	4						
2. Political economy	214	114			100					2	4	4	3		
3. Dialectical and historical materialism	140	70			70						4	2	3		
4. History of philosophy	70	70												4	
5. Logic	70	44		26						4					
6. Psychology	70	46	24							4					
7. Pedagogy and its history	86	86									2	3			
8. Methods of teaching history	68	34		34								2	2		
9. Latin	104			104				4	2						
10. Foreign language	272			272		4	4		4						
11. Old Russian language	36			36			2								
12. Fundamentals of archaeology	36	36						2							
13. History of primitive society and fundamentals of ethnography.	72	72				4									
14. History of U.S.S.R	476	296		180		2	2	6	6	6	6				

15. History of ancient world	134	98		36		3	5							
16. History of middle ages	136	96		40				4	4					
17. History of modern and current times	348	248		100						5	4	5	2	4
18. History of southern and western Slavs	72	72										4		
19. History of foreign eastern countries	254	214		40					4	4	4	3		
20. History of art	64	64									4			
21. History of Russian and Soviet literature	108	108						6						
22. History of republic and regional people	104	104										2	2	2
23. Fundamentals of Soviet law	90	90												5
24. Special elective courses	448	228		220					6	2	2	5	2	9
25. Historiography of U.S.S.R. history	72	72										2	2	
26. Research of sources in U.S.S.R. history	54	54								3				
27. Physical education	136			136				2	2	2	2			

CURRICULUM REQUIREMENTS (IN ABSOLUTE NUMBERS)

Number of standard calculations	12					5	5						2	
Number of course papers	3								1		1		1	
Number of examinations	33					2	3	3	4	4	4	4	4	5
Number of tests	30					1	4	3	5	4	5	3	4	1

Optional subjects:
1. Physical education
2. Foreign language
3. History of foreign literature
4. School hygiene
5. History of religion and atheism
6. Ancient Greek language
7. Slavonic literature
8. Fundamentals of journalism

Production practice

	Semester number	Weeks
1. Archaeological, ethnographic, museum	1–4	6
2. Pioneer work	6	4
3. Production or pedagogical practice	8	16
4. Production in archives, museums, libraries, manuscript resources	9	8
Total		34

Student may take either diploma work combined with State examinations:
1. History of C.P.S.U.
2. History of U.S.S.R.

Or State examinations:
1. History of C.P.S.U.
2. History of U.S.S.R.
3. General history (according to special program)
4. Methods of teaching history

Table 3.—Specialty: Philosophy

[This curriculum of 5 years, 4 months is for the following specialists: (1) Teacher of philosophy and fundamentals of Marxism-Leninism; or (2) philosopher, teacher of logic and philosophy. Data from Source A]

Subjects	Total	Total hours in program			Hours per week by year and by semester										
					1st year		2d year		3d year		4th year		5th year		6th year
		Lectures	Laboratory work	Seminars and practical studies	1st semester 18 weeks	2d semester 16 weeks	3d semester 18 weeks	4th semester 16 weeks	5th semester 18 weeks	6th semester 16 weeks	7th semester 18 weeks	8th semester 16 weeks	9th semester 18 weeks	10th semester 18 weeks	11th semester 18 weeks
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Total hours	**4,540**	**2,364**	**260**	**1,916**	**32**	**32**	**32**	**32**	**25**	**26**	**27**	**23**	**16**	**16**	**4**
1. Dialectical materialism (including dialectical logic)	300	150		150	2	4	4	4	4						Diploma work and State examinations.
2. Historical materialism	200	100		100						4	4	4			
3. History of foreign philosophy (Ancient, Middle Ages, Modern)	344	172		172			4	4	4	4	4				
4. History of philosophy of peoples of U.S.S.R	250	146		104					4	6	4				
5. History of Marxist-Leninist philosophy	276	140		136							4	6	6		
6. Current bourgeois philosophy and sociology	140	72		68								4	4		
7. Theory of scientific communism	72	72												4	
8. Fundamentals of Marxist-Leninist ethics	100	68		32										4	2
9. Fundamentals of Marxist-Leninist esthetics	100	54		46										4	2
10. History and theory of atheism	140	72		68						2	4	2			
11. Logic (including mathematical logic)	208	104		104	4	4	4								
12. Fundamentals of philosophical problems of natural science	68	68						2	2						

13. Political economy	310	170		140	6	4	4	4							Diploma work and State examinations.
14. History of C.P.S.U	240	140		100					4	4	3	3			
15. Psychology	136	80	56		4	4									
16. Pedagogy and methods of teaching philosophical sciences	72	72											4		
17. Special courses and special seminars in philosophy	240	140		100					2	2	2	2	2	4	
18. Natural science subjects:															
a. Higher mathematics	136	68		68	4	4									
b. General physics	168	100	68			2	4	4							
c. Chemistry	100	68	32				4	2							
d. Biology	140	72	68		4	2	2								
e. Physiology of higher nervous activity	72	36	36		2	2									
19. Special courses and special seminars in natural and social sciences (elective)	320	200		120				6	5	4	2	2			
20. Foreign language	272			272	4	4	4	4							
21. Physical education	136			136	2	2	2	2							

CURRICULUM REQUIREMENTS (IN ABSOLUTE NUMBERS)

Number of course papers	4						1		1		1		1		
Number of examinations	36				3	4	4	4	3	4	3	4	3	4	
Number of tests	40				5	6	5	5	3	4	5	3	1	1	2

Optional subjects:
1. Philosophical problems of physics
2. Philosophical problems of biology
3. Philosophical problems of chemistry
4. History of physics
5. Mathematical logic
6. Astronomy
7. History of State and law
8. Cybernetics
9. History of art
10. Foreign language
11. Greek
12. Latin
13. History of national economy
14. General history (ancient, middle ages, modern)
15. History of U.S.S.R.

Practice:	Semester No.	Weeks
1. Practice of propaganda and lecture work	9	18
2. Pedagogical practice	10	18
3. Prediploma practice	10	4
Total		40

Diploma work—State examinations:
Dialectical and historical materialism

Table 4.—Specialty: Psychology (individual curriculum for Moscow State University)

[This 5-year curriculum is for the following specialists: (1) Psychologist, with title of specialization; or (2) teacher of psychology. Data Source C]

Subjects	Total	Total hours in program				Hours per week by year and by semester										
						1st year		2d year		3d year		4th year		5th year		6th year
		Lectures	Laboratory work	Practical studies	Seminars	1st semester 18 weeks	2d semester 16 weeks	3d semester 18 weeks	4th semester 16 weeks	5th semester 18 weeks	6th semester 16 weeks	7th semester 18 weeks	8th semester 12 weeks	9th semester 18 weeks	10th semester 16 weeks	11th semester 12 weeks
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
TOTAL HOURS	**4,752**	**2,872**	**1,714**	**966**		**32**	**32**	**32**	**32**	**32**	**32**	**32**	**28**	**16**	**16**	**4**
1. History of C.P.S.U.	220	120		100						4	4	3	3			Diploma work.
2. Political economy	150	80		70		4	2	3								
3. Dialectical and historical materialism	270	150		120				4	4	4	4					
4. History of philosophy	200	120		80					4	4	4					
5. Logics with elements of mathematical logic.	158	88		70		4	2	3								
6. Elements of higher mathematics	272	136		136		4	4	4	4							
7. Use of mathematical methods in psychology.	72	40		32						4						
8. Psycholinquistics	48	48											4			
9. Foreign language	344		334			4	4	4	4	4						
10. General psychology	336	200		136		4	4	4	4	4	4					
11. History of psychology	172	136		36						2	4	4				
12. Practical training in general psychology	412		412						6	4	4	6				

13. Psychology of children and teaching	136	72	64								4	4				
14. Psychology of labor	36	36										2				
15. Pedagogy and its history	86	86									2	3				
16. Methods of teaching psychology	36	18		18								2				
17. Fundamentals of biology	72	40		32		4										
18. Human physiology	204	136	68			6	6									
19. Anatomy and evolution of the nervous system.	136	72	64			4	4									
20. Physiology of higher nervous activity	172	100	72					4	4	2						
21. Neurological fundamentals of psychology.	60	30	30										5			
22. Anthropology	64	64					4									
23. Courses in specialization (including special courses and special seminar electives).	520	300	220								2	4	8	8	8	4
24. Special practical training	440		440									4	8	8	8	
25. Physical education	136			136		2	2	2	2							

CURRICULUM REQUIREMENTS (IN ABSOLUTE NUMBERS)

Number of course papers	3								1		1		1			
Number of examinations	33					4	3	4	3	4	4	4	4	1	2	
Number of tests	40					4	6	4	4	3	5	5	2	3	2	2

Optional subjects:
1. Mathematical logic
2. Cybernetics and psychology
3. Electrophysiological methods
4. Fundamentals of radio technics
5. Psychology of art
6. Fundamentals of Marxist-Leninist esthetics
7. Ethics
8. History and theory of atheism
9. Experimental pedagogy
10. Foreign language
11. Physical education and sport

Production practice:	Semester Number	Weeks
1. Pedagogical practice	8	4
2. Production practice in clinics, laboratories, children's establishments, etc. (according to specialty)	9, 10	34
Total		38

Diploma work—State examination:
(None listed)

Table 5.—Specialty: Law

[This 5-year curriculum is for the following specialist: Lawyer. Data from Source A]

Subjects	Total	Total hours in program				Hours per week by year and by semester									
						1st year		2d year		3d year		4th year		5th year	
		Lectures	Labora-tory work	Prac-tical studies	Semi-nars	1st semes-ter 18 weeks	2d semes-ter 16 weeks	3d semes-ter 18 weeks	4th semes-ter 16 weeks	5th semes-ter 18 weeks	6th semes-ter 10 weeks	7th semes-ter 14 weeks	8th semes-ter 16 weeks	9th semes-ter 22 weeks	10th semes-ter 0 weeks
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Total hours	**4,138**	**2,302**	**40**	**1,304**	**492**	**32**	**31**	**30**	**32**	**32**	**32**	**32**	**31**	**10**	
1. History of C.P.S.U	220	120			100					3	4	4	4		Di-ploma work and State examina-tions.
2. Political economy	300	180			120	5	5	4	4						
3. Dialectical and historical materialism	140	70			70			4	2	2					
4. Logic	54	36			18	3									
5. Foreign language	270			270		4	4	4	4						
6. Latin	100			100		3	3								
7. Theory of state and law	130	80			50	4	4								
8. History of state and law	130	100			30	4	4								
9. History of state and law of U.S.S.R	130	90			40	4	4								
10. History of state and law of Union-Republics	48	48											3		
11. History of political doctrines	92	92										2	4		
12. Fundamentals of Roman civil law	32	32					2								
13. Soviet state law	108	76			32			6							
14. Organization of the Court and Procurator's Office in U.S.S.R.	54	54				3									
15. State law of the countries of people's democracies	48	48							3						
16. State law of bourgeois states	70	70										5			
17. Soviet administrative law	100	64		36					3	3					
18. Soviet financial law	54	42		12						3					

19. Soviet criminal law	210	103		102				5	3	4				
20. Soviet criminal process	132	68		64						4	6			
21. Soviet criminology	156	52	40	64						2	5	5		
22. Soviet civil law	228	122		106				3	5	3	4			
23. Soviet family law	30	30									3			
24. Soviet civil process	132	68		64						4	6			
25. Soviet labor law	132	68		64					4	4				
26. Soviet land law	54	40		14				3						
27. Soviet collective-farm law	96	48		48							4	4		
28. International law	92	92										2	4	
29. Soviet judicial statistics	48	34		14			3							
30. Fundamentals of bookkeeping and accounting	56	32		24								4		
31. Forensic medicine	48	48											3	
32. Forensic psychiatry	48	48											3	
33. Procurator's supervision in U.S.S.R.	56	30		26								4		
34. Special course and special seminar in theory of state and law	64	32			32								4	
35. Special courses (electives)	340	180		160								2	6	10
36. Physical education	136			136		2	2	2	2					

CURRICULUM REQUIREMENTS (IN ABSOLUTE NUMBERS)

Number of course papers	4						1		1		1		1		State examinations.
Numbers of examinations	35					4	4	4	4	5	4	4	4	2	
Number of tests	42					5	5	4	5	5	5	5	6	2	

Optional subjects:
  1. Foreign language
  2. Physical education
  3. Court discourse
  4. The court in literature
  5. History of international relations
  6. History of economic doctrines
  7. History of atheism and religion

Study practice:
  Familiarization practice, 3 weeks

Production practice:	Semester No.	Weeks
1. In People's court	6	4
2. In district procurator's office	6	5
3. In local state and administrative organs	6	3
4. Production training (probationary work)	6	22
Total		34

State examinations:
  1. History of C.P.S.U.
  2. Soviet civil law and subject related to future work
  3. Soviet criminal law or Soviet state and administrative law

Table 6.—Specialty: Mathematics

[This curriculum is for the following specialists: (1) Mathematician, teacher of mathematics, length of curriculum: 5 years; or (2) mathematician, with title of specialization, 5½ years. Data from Source A]

Subjects	Total	Total hours in program				Hours per week by year and by semester										
						1st year		2nd year		3rd year		4th year		5th year		6th year
		Lectures	Laboratory work	Practical studies	Seminars	1st semester 18 weeks	2d semester 16 weeks	3d semester 18 weeks	4th semester 16 weeks	5th semester 18 weeks	6th semester 16 weeks	7th semester 18 weeks	8th semester 16 weeks	9th semester 18 weeks	10th semester 10 weeks	11th semester 17 weeks
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Total hours	**4,482**	**2,380**	**218**	**1,444**	**440**	**31**	**32**	**32**	**32**	**32**	**32**	**32**	**14**	**10**	**12**	**8**
1. History of C.P.S.U.	220	120			100	3	4	3	3						Diploma work or State examinations.	Diploma work.
2. Political economy	150	80			70					4	3	2				
3. Dialectical and historical materialism	140	70			70							4	2	2		
4. Foreign language	272			272		4	4	4	4							
5. Pedagogy and its history	70	70									2	2				
6. Elementary mathematics	70	36		34							2	2				
7. Methods of teaching mathematics	70	40		30								2	2			
8. Mechanical drawing with fundamentals of descriptive geometry.	102		102			3	3									
9. Astronomy	54	54						3								
10. Analytical geometry	188	102		86		5	6									
11. Mathematical analysis	528	284		244		8	9	8	6							
12. Higher algebra	208	142		66		6	4	2								
13. Differential geometry	108	82		26				6								
14. Differential equations	136	68		68				4	4							
15. Equations of mathematical physics	152	112		40							5	4				
16. Theory of functions of complex variables.	102	68		34						3	3					
17. Theoretical mechanics	236	140		96					5	6	3					

18. Theory of probability	54	36		18						3						
19. Differential calculus	36	36								2						
20. Physics	282	112	116	54					6	5	6					
21. Selected topics of theoretical physics	100	100										2	4			
22. Theory of functions of a real variable and functional analysis.	86	86							2	3						
23. Foundations of geometry	72	72										4				
24. Theory of numbers	40	40													4	
25. Special courses and seminars (electives).	490	290			200						4	2	2	8	8	8
26. Modern computing machines and programing.	104	72		32								4	2			
27. Methods of approximate calculation	68	68										2	2			
28. Mathematical practical training	208			208						6	4	2				
29. Physical education	136			136		2	2	2	2							

CURRICULUM REQUIREMENTS (IN ABSOLUTE NUMBERS)

Number of course papers	1											1				
Number of examinations	33					3	3	3	4	4	4	5	2	2	2	1
Number of tests	34					3	6	5	4	3	3	3	4	1	1	1

Optional subjects:
1. Physical education
2. Foreign language
3. School hygiene
4. History of mathematics
5. Mechanics of solid medium
6. Automatic regulation
7. Fundamentals of vector and tensor analysis
8. Topology

Study practice:
1. Practice on computing machines (4 weeks)

Production practice:	Semester No.	Weeks
1. Pedagogical practice	8–9	22
2. Production practice	8–9	39
Total		61

Student may take either diploma work or State examinations:
1. Dialectical and historical materialism
2. Mathematics (according to special program)
3. Methods of teaching mathematics

Table 7.—Specialty: Physics

[This curriculum is for the following specialists: (1) Physicist, with title of specialization. Length of curriculum: 5–5½ years. Data from Source A]

Subjects	Total	Total hours in program				Hours per week by year and by semester										
						1st year		2d year		3d year		4th year		5th year		6th year
		Lectures	Laboratory work	Practical studies	Seminars	1st semester 18 weeks	2d semester 16 weeks	3d semester 18 weeks	4th semester 16 weeks	5th semester 18 weeks	6th semester 16 weeks	7th semester 25 weeks	8th semester 20 weeks	9th semester 18 weeks	10th semester 14 weeks	11th semester 13 weeks
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Total hours	**4,781**	**1,922**	**1,190**	**1,089**	**580**	**32**	**32**	**32**	**32**	**32**	**32**	**32**	**11**	**12**	**12**	**12**
1. History of C.P.S.U	224	120	-------	-------	104	3	3	3	4	-------	-------	-------	-------	-------	Diploma work or State examinations.	Diploma work.
2. Political economy	150	80	-------	-------	70	-------	-------	-------	-------	4	2	2	-------	-------		
3. Dialectical and historical materialism	140	70	-------	-------	70	-------	-------	-------	-------	-------	-------	3	2	2		
4. Foreign language	272	-------	-------	272	-------	2	2	2	2	2	2	2	2	-------		
5. Chemistry (according to special programs).	68	28	40	-------	-------	-------	-------	2	2	-------	-------	-------	-------	-------		
6. Practical training in workshops	102	-------	102	-------	-------	3	3	-------	-------	-------	-------	-------	-------	-------		
7. Fundamentals of mechanical drawing	86	18	-------	68	-------	3	2	-------	-------	-------	-------	-------	-------	-------		
8. Higher mathematics:																
a. Mathematical analysis	480	240	-------	240	-------	7	6	9	6	-------	-------	-------	-------	-------		
b. Analytical geometry and higher algebra.	150	82	-------	68	-------	5	4	-------	-------	-------	-------	-------	-------	-------		
c. Methods of mathematical physics.	188	128	-------	60	-------	-------	-------	-------	-------	6	5	-------	-------	-------		
9. General physics:																
a. Mechanics, molecular physics, electricity and optics.	372	266	-------	106	-------	4	6	6	6	-------	-------	-------	-------	-------		

b. Atomic physics	108	72	--------	36	--------	--------	--------	--------	--------	6	--------	--------	--------	--------		
c. Nuclear physics	64	64	--------	--------	--------	--------	--------	--------	--------	--------	4	--------	--------	--------		
10. Physics practicum	526	--------	526	--------	--------	3	4	4	4	6	4	4	--------	--------		
11. Fundamentals of electro-radio technics	120	48	72	--------	--------	--------	--------	--------	3	4	--------	--------	--------	--------		
12. Theoretical physics:																
a. Theoretical mechanics	120	80	--------	40	--------	--------	--------	4	3	--------	--------	--------	--------	--------		
b. Field and electron theories	120	100	--------	20	--------	--------	--------	--------	--------	4	3	--------	--------	--------		
c. Thermodynamics and statistical physics.	114	94	--------	20	--------	--------	--------	--------	--------	--------	4	2	--------	--------		
d. Quantum mechanics	125	100	--------	25	--------	--------	--------	--------	--------	--------	--------	5	--------	--------		
13. Subjects according to specialization	470	290	--------	--------	180	--------	--------	--------	--------	--------	4	8	4	4	4	
14. Laboratory work according to specialization.	450	--------	450	--------	--------	--------	--------	--------	--------	--------	4	6	3	6	5	
15. Special courses (electives)	156	--------	--------	--------	156	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	12
16. Computational mathematics and electron calculation system.	42	42	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	3	--------
17. Physical education	136	--------	--------	136	--------	2	2	2	2	--------	--------	--------	--------	--------	--------	--------

CURRICULUM REQUIREMENTS (IN ABSOLUTE NUMBERS)

Number of course papers	1	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------
Number of examinations	29	--------	--------	--------	--------	3	4	2	4	3	3	4	--------	4	2	--------
Number of tests	42	--------	--------	--------	--------	5	6	5	6	5	6	5		1	2	1

Optional Subjects:
1. Foreign language
2. Physical education
3. Technology of materials
4. History of physics
5. Basic problems of modern physics (short courses in various branches of physical sciences)
6. Philosophical problems of current natural science

Student may take either diploma work or State examinations:
1. Dialectical and historical materialism
2. Physics (according to special program)
3. Methods of teaching physics

Production practice:	Semester No.	Weeks
1. Production practice	8, 9	38
2. a. Pedagogical practice	8, 9	23
b. Production practice	8	6
Total		67

Table 8.—Specialty: Chemistry

[This curriculum is for the following specialists: (1) Chemist, with title of specialization, length of curriculum: 5½ years; or (2) chemist, teacher of chemistry, 5 years. Data from Source A]

Subjects	Total	Total hours in program				Hours per week by year and by semester										
						1st year		2d year		3d year		4th year		5th year		6th year
		Lectures	Laboratory work	Practical studies	Seminars	1st semester 18 weeks	2d semester 18 weeks	3d semester 18 weeks	4th semester 16 weeks	5th semester 18 weeks	6th semester 16 weeks	7th semester 18 weeks	8th–9th semesters 42 weeks		10th semester 17 weeks	11th semester 17 weeks
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Total hours	**4,525**	**1,725**	**1,822**	**838**	**140**	**32**	**32**	**32**	**32**	**32**	**32**	**32**	**12**		**11**	--------
1. History of C.P.S.U	220	120	--------	100	--------	3	3	3	4	--------	--------	--------	--------		Diploma work or State examinations.	Diploma work.
2. Political economy	150	80	--------	--------	70	--------	--------	--------	--------	3	2	3	--------			
3. Dialectical and historical materialism	140	70	--------	--------	70	--------	--------	--------	--------	--------	--------	3	2			
4. Foreign language	270	--------	--------	270	--------	4	4	4	4	--------	--------	--------	--------			
5. Higher mathematics	394	204	--------	190	--------	8	8	5	2	--------	--------	--------	--------			
6. Physics	336	168	168	--------	--------	--------	4	8	8	--------	--------	--------	--------			
7. Fundamentals of mechanical drawing	54	--------	--------	54	--------	--------	--------	--------	--------	3	--------	--------	--------			
8. Inorganic chemistry	461	123	338	—	--------	13	11	--------	--------	--------	--------	--------	--------			
9. Analytical chemistry	434	66	368	--------	--------	--------	--------	10	8	7	--------	--------	--------			

10. Organic chemistry	404	132	272	----	----	----	----	----	4	10	10	----	----		
11. Physical chemistry	396	140	204	52	----	----	----	----	----	4	9	10	----		
12. Selected topics of theoretical physics and molecular structure.	132	132	----	----	----	----	----	----	----	2	6	----	----		
13. Chemistry of crystals	54	20	----	34	----	----	----	----	----	3	----	----	----		
14. Colloidal chemistry	126	54	72	----	----	----	----	----	----	----	----	7	----		
15. Fundamentals of chemistry of polymers	48	48	----	----	----	----	----	----	----	----	3	----	----		
16. Processes and apparatus of chemical industry.	54	36	----	18	----	----	----	----	----	----	----	3	----		
17. Practical training in workshops	36	----	36	----	----	2	----	----	----	----	----	----	----		
18. Chemical technology	212	126	86	----	----	----	----	----	----	----	2	3	3		
19. Special courses and laboratories	484	206	278	----	----	----	----	----	----	----	----	3	7		8
20. Physical education	120	----	----	120	----	2	2	2	2	----	----	----	----		

CURRICULUM REQUIREMENTS (IN ABSOLUTE NUMBERS)

Number of course papers	1	----	----	----	----	----	----	----	----	----	----	1	----	----	----
Number of examinations	29	----	----	----	----	2	4	2	4	4	4	3	----	4	2
Number of tests	28	----	----	----	----	4	3	4	2	3	4	5	----	1	2

Optional subjects:
1. Physical education
2. Selected topics of higher mathematics
3. Roentgenography
4. Foreign language
5. Chromatography
6. Chemical thermodynamics
7. Chemical kinetics
8. Kinetics of electrode processes
9. Theory of catalysts
10. Biochemistry
11. Theory of solutions
12. History of chemistry

	Semester No.	Weeks
Production practice:		
Production and pedagogical practice (probationary)	8, 9	42
Total		42

Student may take either diploma work or State examinations:
1. Dialectical and historical materialism
2. Organic or inorganic chemistry
3. Methods of teaching chemistry

Table 9.—Specialty: Biology

[This curriculum is for the following specialists: (1) Biologist, teacher of biology and chemistry, length of curriculum: 5 years; or (2) biologist, with title of specialization, teacher of biology and chemistry, 5½ years. Data from Source A]

Subjects	Total	Total hours in program				Hours per week by year and by semester										
						1st year		2d year		3d year		4th year		5th year		6th year
		Lectures	Laboratory work	Practical studies	Seminars	1st semester 18 weeks	2d semester 15 weeks	3d semester 18 weeks	4th semester 15 weeks	5th semester 18 weeks	6th semester 15 weeks	7th semester 18 weeks	8th semester 10 weeks	9th semester 18 weeks	10th semester 10 weeks	11th semester 13 weeks
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Total hours	**4,351**	**1,845**	**1,990**	**296**	**230**	**31**	**32**	**32**	**32**	**31**	**32**	**32**	**32**	**9**	**12**	**4**
1. History of C.P.S.U.	220	120			100	3	4	3	4							Diploma work.
2. Political economy	140	80			60					3	2	3				
3. Dialectical and historical materialism	140	70			70								4	4	3	
4. Foreign language	264		264			4	4	4	4						State examinations or diploma work.	
5. Psychology	54	36	18							3						
6. Pedagogy and its history	84	84									2	3				
7. Methods of teaching biology and chemistry.	112	40	52	20								4	4			
8. Higher mathematics	132	60		72		4	4									
9. Fundamentals of variable statistics	36	20		16				2								
10. Physics	168	80	88					6	4							
11. Inorganic and analytical chemistry	264	90	174			8	8									
12. Organic chemistry	108	48	60					6								
13. Physical and colloidal chemistry	90	46	44						6							
14. Chemistry of polymers	36	36								2						
15. Ecology	30	30									2					
16. Introduction to biology	36	36				2										
17. Botany	260	100	160			4	5	3	4							
18. Zoology	260	100	160			4	5	3	4							
19. Human anatomy	54	30	24					3								

20. Microbiology	60	36	24	----	----	----	----	----	4	----	----	----	----	----		
21. Biochemistry	90	46	41	----	----	----	----	----	----	5	----	----	----	----		
22. Histology and embryology	72	36	36	----	----	----	----	----	----	4	----	----	----	----		
23. Plant physiology	132	62	70	----	----	----	----	----	----	4	4	----	----	----		
24. Human and animal physiology	146	72	74	----	----	----	----	----	----	4	5	----	----	----		
25. Genetics with fundamentals of selection.	75	45	30	----	----	----	----	----	----	----	5	----	----	----		
26. Biophysics	60	40	20	----	----	----	----	----	----	----	4	----	----	----		
27. Cytology	36	24	12	----	----	----	----	----	----	2	----	----	----	----		
28. Fundamentals of agriculture:																
a. Soil sciences with fundamentals or agriculture.	72	46	26	----	----	----	----	----	----	4	----	----	----	----		
b. Plant growing	45	21	24	----	----	----	----	----	----	----	3	----	----	----		
c. Fundamentals of animal husbandry.	45	21	----	24	----	----	----	----	----	----	3	----	----	----		
29. Darwinism and the history of evolutionary doctrines.	112	80	----	32	----	----	----	----	----	----	----	4	4	----		
30. Practical training either by chair or by specialization.	356	----	356	----	----	----	----	----	----	----	----	12	14	----		
31. Special courses (electives)	430	200	230	----	----	----	----	----	----	----	2	6	6	5	9	4
32. Physical education	132	----	----	132	----	2	2	2	2	----	----	----	----	----	----	----

CURRICULUM REQUIREMENTS (IN ABSOLUTE NUMBERS)

Number of course papers	1	----	----	----	----	----	----	----	----	----	----	----	1	----	----	----
Number of examinations	30	----	----	----	----	2	3	3	4	4	4	4	2	2	2	----
Number of tests	35	----	----	----	----	5	4	5	4	3	5	4	2	1	2	1

Optional subjects:
1. Foreign language
2. School hygiene
3. Extracurricula work
4. Expressive reading
5. Physical education
6. Latin
7. Geology with fundamentals of paleontology
8. Instructional scientific cinematography and photography

Study practice:

	Weeks
1. In botany and zoology	8
2. In fundamentals of agriculture in collective farms, state farms, and experimental farms	4
Total	12

Production practice:

	Semesters	Weeks
1. Production practice	8	13
2. Pedagogical practice	9	17
		(for 5-year program)30
3. Additional production practice (for 5½-year programs)	10	13
Total		30 or 43

Student may take either diploma work or State examinations:
1. Dialectical and historical materialism
2. Biology (according to special program)
3. Methods of teaching biology and chemistry

Table 10.—Specialty: Economics of National Economy

[This 5-year curriculum is for the following specialist: Economist. Data from Source A]

Subjects	Total	Total hours in program				Hours per week by year and by semester									
						1st year		2d year		3d year		4th year		5th year	
		Lectures	Laboratory work	Practical studies	Seminars	1st semester 18 weeks	2d semester 16 weeks	3d semester 18 weeks	4th semester 16 weeks	5th semester 18 weeks	6th semester 13 weeks	7th semester 17 weeks	8th semester 30 weeks	9th semester 22 weeks	10th semester 12 weeks
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Total hours	**3,620**	**1,980**	**90**	**1,180**	**370**	**16**	**16**	**32**	**32**	**32**	**32**	**29**	**8**	**7**	**4**
1. History of C.P.S.U.	220	120			100	3	3	3	4						
2. Dialectical and historical materialism	140	70			70					4	6				
3. Political economy	300	170			130	3	3	5	4						4
4. History of economic doctrines	70	70								2	3				
5. History of national economy of U.S.S.R. and foreign countries.	110	90			20	4	2								
6. Economic geography of U.S.S.R. and foreign countries.	100	80			20		2	4							Diploma work or State examinations.
7. Foreign language	240			240		2	2	4	4	2					
8. Higher mathematics with fundamentals of statistics.	180	90		90		4	4	2							
9. General theory of statistics	100	60		40				6							
10. Economic statistics	140	90		50					4	4					
11. Accounting	120	50		70				2	5						
12. Analysis of economic activity	100	40		60								4	1		
13. U.S.S.R. finance and credit	100	70			30				2	4					
14. Planning of national economy	200	120		80						4	5	4			
15. Soviet law	130	100		30							6	3			
16. Fundamentals of mechanization and computer programing.	130	60		70								4	2		
17. Economics of industry	140	100		40						2	4	3			
18. Economics of agriculture	100	70		30						4	2				
19. Economics of trade	100	70		30						4	2				
20. Economics of material-technical supply	100	70		30								4	1		
21. Elective courses (see 6 courses listed below)	220	140		80								4	2	4	
22. Subjects according to specialization	440	250	90	100				4	7	2	4	3	2	3	
23. Physical education	140			140				2	2						

CURRICULUM REQUIREMENTS (IN ABSOLUTE NUMBERS)

Number of course papers	4	-------	-------	-------	-------	-------	-------	1	1	-------	-------	1	1	-------	
Number of examinations	28	-------	-------	-------	-------	2	3	3	4	5	4	3	-------	4	
Number of tests	28	-------	-------	-------	-------	3	3	5	3	1	4	5		4	

Elective Courses

(Elaboration of subject 21 in table)

	Hours
1. Economics of transport	70
2. Economics of construction	70
3. Prices and price formation in U.S.S.R.	80
4. Financing branches of national economy	70
5. Balance of national economy	70
6. Economics of trade with fundamentals of rate setting	70

Subjects According to Specialization

(Elaboration of subject 22 in table)

A. Specialization in economics of industry

1. Organization and planning of industrial enterprise	160
2. Technology of a branch of industry	140
3. Power industry	90
4. Fundamentals of mechanical drawing	50

B. Specialization in economics of trade

1. Organization and techniques of Soviet trade	190
2. Freight and tariffs	60
3. Science of manufactured and food products, commodities	190

C. Specialization in economics and planning of material-technical supply

1. Organization and planning of sales	80
2. Science of commodities of industrial materials, machines and equipment	190
3. Transport of freight and tariffs	60
4. Standardizing expense of materials	40
5. Organization and planning of industrial enterprise	80

D. Specialization in economics of agriculture

	Hours
1. Organization and planning of agricultural production	140
2. General land and plant science	100
3. Mechanization and electrification of agriculture	150
4. Animal husbandry	90

Optional subjects:

1. Accounting techniques
2. Physical education

Study practice:

Technical economic or agro-technical 4 weeks

Production practice:

	Semester No.	Weeks
Planning-economic	8, 9	52
Total		52

Student may take either diploma work or State examinations:

1. Political economy
2. Planning of national economy
3. Economic statistics
4. Economics, organization and planning of production (according to specialization)

APPENDIX B

Tables

Curriculums for Medical Institutes

Table 11.—Specialty: Therapeutics

[This 6-year curriculum is for the following specialist: Physician. Data from Source B. Divided numbers in table indicate respectively number of lecture hours and hours of practical training]

Subjects	Total	Total hours in program				Hours per week by year and by semester											
						1st year		2d year		3d year		4th year		5th year		6th year	
		Lectures	Laboratory work	Practical studies	Seminars	1st semester 18 weeks	2d semester 16 weeks	3d semester 17 weeks	4th semester 16 weeks	5th semester 19 weeks	6th semester 15 weeks	7th semester 18 weeks	8th semester 13 weeks	9th semester 18 weeks	10th semester 16 weeks	11th semester 20 weeks	12th semester 15 weeks
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Total Hours	**6,775**	**2,344**	**2,823**	**+1,608**	-------	**36**	**35**	**36**	**32**	**36**	**36**	**33**	**31**	**34**	**34**	**30**	**30**
1. History of C.P.S.U.	160	86	-------	74	-------	4	3	5{40h 45h	-------	-------	-------	-------	-------	-------	-------	-------	-------
2. Political economy	90	48	-------	42	-------	-------	-------		5{45h 36h	-------	-------	-------	-------	-------	-------	-------	-------
3. Dialectical and historical materialism.	140	80	-------	60	-------	-------	-------	-------		2	2	2	-------	-------	-------	-------	-------

4. Foreign language and Latin (0/3 in 1st semester and 0/2 in 2d).	220	------	------	220	------	0/5	0/4	0/2	0/2	------	------	------	------	------	------	------	------
5. Physical education, therapeutic physical culture and medical control (1/1 in 10th semester).	166	16	16	134	------	0/2	0/2	0/2	0/2	------	------	------	------	------	1/1	------	------
6. Physics	136	68	40	28	------	2/2	2/2	------	------	------	------	------	------	------	------	------	------
7. Biology	190	86	104	------	------	3/4	2/2	------	------	------	------	------	------	------	------	------	------
8. Human anatomy	392	118	274	------	------	2/6	3/4	2/6	------	------	------	------	------	------	------	------	------
9. Histology and embryology	182	66	116	------	------	------	2/3	2/4	------	------	------	------	------	------	------	------	------
10. (a) inorganic and analytic chemistry, (3/3 in 1st semester, 0/2 in 2d); (b) bio- and organic-chemistry, (2/2 in 2d semester); physical and colloidal chemistry (1/2 in 3d semester).	140	54	86	------	------	3/3	2/4	3/4	3/4	------	------	------	------	------	------	------	------
	295	131	164	------	------	------	------	------	------	------	------	------	------	------	------	------	------
11. Physiology	247	132	115	------	------	------	------	3/3	5/4	------	------	------	------	------	------	------	------
12. Microbiology	207	70	137	------	------	------	------	------	2/5	2/3	------	------	------	------	------	------	------
13. Pathological physiology	155	68	87	------	------	------	------	------	------	2/3	2/2	------	------	------	------	------	------
14. Pharmacology	170	68	102	------	------	------	------	------	------	2/3	2/3	------	------	------	------	------	------
15. Pathological anatomy with autopsy 18 hours (in 5th or 6th year).	192	87	105	------	------	------	------	------	------	3/3	2/2	------	------	------	------	------	------
16. Propaedeutics of internal diseases with roentgenogy (12/24 in 6th semester) and radiology (12/24 in 9th).	274	133	141	------	------	------	------	------	------	4/3	3/4	------	------	2	------	------	------
17. General surgery	189	87	102	------	------	------	------	------	------	3/3	2/3	------	------	------	------	------	------
18. Operative surgery topographic anatomy.	117	33	84	------	------	------	------	------	------	------	1/2	1/3	------	------	------	------	------
19. Hygiene	162	81	81	------	------	------	------	------	------	------	3/3	2/2	------	------	------	------	------
20. Organization of public health and history of medicine (20/12 in 7th semester) and local air defense.	125	51	74	------	------	------	------	------	------	------	------	2	1/2	1/2	------	------	------

Table 11.—Specialty: Therapeutics—Continued

Subjects	Total	Total hours in program				Hours per week by year and by semester											
						1st year		2d year		3d year		4th year		5th year		6th year	
		Lectures	Laboratory work	Practical studies	Seminars	1st semester 18 weeks	2d semester 16 weeks	3d semester 17 weeks	4th semester 16 weeks	5th semester 19 weeks	6th semester 15 weeks	7th semester 18 weeks	8th semester 13 weeks	9th semester 18 weeks	10th semester 16 weeks	11th semester 20 weeks	12th semester 15 weeks
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
21. Faculty therapy with tuberculosis (12/24 in 7th semester) and physiotherapy (8/18 in 8th semester).	253	111	142									4/5	3/4				
22. Faculty surgery with urology (12/18 in 8th semester).	209	98	111									4/4	2/3				
23. Neurology	106	44	62										2/2	1/2			
24. Dermatology and venereology	101	44	57										2/3	1/1			
25. Obstetrics and gynecology	379	83	96	(+200 in 6th year)								2/2	1/2	1/1	1/1	200 (laboratory work)	
26. Otorhinolaryngo	88	31	57										1/3	1/1			
27. Children's diseases	166	66	100											1/2	3/4		
28. Ophthalmology	80	32	48												2/3		
29. Psychiatry	90	36	54											2/3			
30. Forensic medicine	100	34	66											1/1	1/3		

31. Hospital therapy with polyclinic and therapeutic physical culture (0/8).	486	68	68	+350 in 6th year		--------	--------	--------	--------	--------	--------	--------	--------	2/2	2/2	--------	--------
32. Infectious diseases with epidemiology (18/42).	214	32	32	+150 in 6th year		--------	--------	--------	--------	--------	--------	--------	--------	--------	2/2	500 laboratory work	
33. Hospital surgery with polyclinic and stomatology (12/24) in 9th semester); traumatology with orthopedics (60 in 6th year) and therapeutic physical culture (0/8).	554	102	102	+350 in 6th year		--------	--------	--------	--------	--------	--------	--------	--------	3/3	3/3	--------	350

CURRICULUM REQUIREMENTS (IN ABSOLUTE NUMBERS)

Number of examinations	--------	--------	--------	--------	--------	2	4	3	4	2	5	4	3	5	4	--------	1
Number of tests	--------	--------	--------	--------	--------	4	4	4	2	--------	1	1	--------	1	1	--------	--------

Optional subjects:	Hours per week
1. Physical education	2 Semesters No. 1, 4 4 Semesters 5, 10
2. Foreign language	2
3. Clinical pharmacology	20
4. History of Medicine	20
5. Balneology	18
6. Consultation service on labor	12
7. Therapeutic dietetics	12
8. Endocrinology	20
9. Latin	20
Practical training:	**Weeks**
1. 3d year courses	3
2. Practical training between the 4th and 5th years in June and July in regional and district hospitals and polyclinics on internal and surgical diseases for 8 weeks	8
3. Extracurricular practical training between the 5th and 6th year in July	4

State examinations:
1. History of CPSU; beginning with the academic year 1959-60—Dialectic materialism; with the academic year 1960-61—Dialectic and historical materialism
2. Internal diseases
3. Diseases requiring surgery
4. Obstetrics and gynecology
5. Hygiene with organization of public health

Intermediate examinations at the State examination commissions:
1. Anatomy, 3d semester
2. Histology, 3d semester
3. Physiology, 4th semester
4. Biochemistry, 4th semester

Table 12.—Specialty: Pediatrics

[This 6-year curriculum is for the following specialists: (1) Pediatrician; or (2) physician. Data from Source C]

Subjects	Total	Total hours in program				Hours per week by year and by semester											
						1st year		2d year		3d year		4th year		5th year		6th year	
		Lectures	Laboratory work	Practical training	Seminars	1st semester 18 weeks	2d semester 16 weeks	3d semester 17 weeks	4th semester 16 weeks	5th semester 19 weeks	6th semester 15 weeks	7th semester 19 weeks	8th semester 13 weeks	9th semester 18 weeks	10th semester 17 weeks	11th semester 19 weeks	12th semester 15 weeks
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Total hours	**6,814**	**2,589**	**3,287**	**1,038**	----	**36**	**35**	**36**	**32**	**36**	**36**	**33**	**31**	**35**	**34**	**30**	**30**
1. History of C.P.S.U	160	86	----	74	----	4	3	{40h	----	----	----	----	----	----	----	----	----
2. Political economy	90	48	----	42	----	----	----	5{45h	5 {45h	----	----	----	----	----	----	----	----
3. Dialectic and historical materialism.	140	80	----	60	----	----	----	----	{36h	2	2	2	----	----	----	----	----
4. Foreign language and Latin (0/3 in the 1st semester, 0/2 in 2d).	220	----	----	220	----	0/5	0/4	0/2	0/2	----	----	----	----	----	----	----	----
5. Physical education, therapeutic physical culture, and medical control (1/1 in 10th semester).	168	17	17	134	----	0/2	0/2	0/2	0/2	----	----	----	----	----	1/1	----	----
6. Physics	136	68	40	28	----	2/2	2/2	----	----	----	----	----	----	----	----	----	----
7. Biology	190	86	104	----	----	3/4	2/2	----	----	----	----	----	----	----	----	----	----
8. Human anatomy	392	118	274	----	----	2/6	3/4	2/6	----	----	----	----	----	----	----	----	----
9. Histology and embryology	182	66	116	----	----	----	2/3	2/4	----	----	----	----	----	----	----	----	----
10. (a) Inorganic and analytic chemistry (3/3 in 1st semester 0/2 in 2d).	140	54	86	----	----	3/3	2/4	3/4	3/4	----	----	----	----	----	----	----	----
(b) Bio- and organic chemistry (2/2 in 2d semester) physical and colloidal chemistry (1/2 in 3d).	295	131	164	----	----	----	----	----	----	----	----	----	----	----	----	----	----
11. Physiology	247	132	115	----	----	----	----	3/3	5/4	----	----	----	----	----	----	----	----
12. Microbiology	207	70	137	----	----	----	----	2/5	2/3	----	----	----	----	----	----	----	----
13. Pathological physiology	155	68	87	----	----	----	----	----	----	2/3	2/2	----	----	----	----	----	----
14. Pharmacology	174	68	106	----	----	----	----	----	----	2/4	2/2	----	----	----	----	----	----
15. Pathological anatomy with autopsy (18 hours in 9th semester).	188	83	105	----	----	----	----	----	----	2/3	3/2	----	----	0/1	----	----	----
16. Propaedeutics of internal diseases with roentgenology (12/24 in 5th semester), radiology (12/24 in 9th).	229	99	130	----	----	----	----	----	----	3/4	2/2	----	----	2	----	----	----
17. General surgery	189	87	102	----	----	----	----	----	----	3/3	2/3	----	----	----	----	----	----
18. Operative surgery and topographic anatomy.	102	34	168	----	----	----	----	----	----	----	1/2	1/2	----	----	----	----	----
19. Hygiene and hygiene of children and adolescents (20/40).	185	83	102	----	----	----	----	----	----	----	3/3	2/3	----	----	----	----	----

20. Propaedeutics of children's diseases.	121	53	68								1/2	2/2					
21. Organization of public health with mother and child care (1/1 in 9th semester); history of medicine (20/16 in 9th semester) and local air defense	124	64	30	30									2/2	2/2			
22. Faculty therapy and tuberculosis (1/1 in 7th semester); physiotherapy (8/18 in 8th)	179	83	96									3/3	2/3				
23. Faculty surgery and urology	167	58	109									1/3	3/4				
24. Skin and venereal diseases	96	32	64									1/2	1/2				
25. Nervous diseases	102	51	51									2/2	1/1				
26. Faculty pediatrics	191	80	111										2/3	3/4			
27. Infectious diseases and epidemiology (12/24)	140	70	70											2/2	2/2		
28. Obstetrics and gynecology	229	81	148									1/1	2/3	2/5			
29. Children's infectious diseases and epidemiology.	332	91	91	+150 in 12th semester.											2/2	3/3	150
30. Diseases of ear nose and throat.	95	38	57													2/3	
31. Eye diseases	85	34	51												2/3		
32. Hospital therapy	140	70	70											2/2	2/2		
33. Hospital pediatrics and therapeutic physical culture (0/8).	464	91	148	+225 in 12th semester.											2/2	3/6	225
34. Hospital surgery and stomatology (10/24 in 10th semester); medical physical culture (0/8).	210	105	105											3/3	3/3		
35. Children's surgery and orthopedics.	170	38	57	+75 in 12th semester.												2/3	75
36. Psychiatry	95	38	57													2/3	
37. Forensic medicine	85	34	51												2/3		
CURRICULUM REQUIREMENT (IN ABSOLUTE NUMBERS)																	
Number of examinations						2	4	3	4	2	5	5	4	3	3	2	
Number of tests						4	4	4	2		1		1	2	1		

	Hours per week
Optional subjects:	
1. Physical education	2 4
2. Foreign language	2
3. Clinical pharmacology	20
4. History of medicine	20
5. Rheumatism and its control	20
6. Therapeutic dietetics	12
7. Endocrinology	20
8. Latin	
Practical training—Type of practice:	Weeks
1. 3d year courses	3
2. Practical training in projects between 4th and 5th years in June and July in district hospitals and polyclinics on internal and surgical diseases for 8 weeks	8
3. Extracurricular practical training between 5th and 6th years in July	4

State examinations:
1. History of C.P.S.U.: beginning with the academic year 1959–60, dialectic materialism; with the academic year 1960–61, Dialectic and historical materialism
2. Internal diseases
3. Surgical diseases with pediatric surgery
4. Pediatrics with children's infectious diseases
5. Hygiene with organization of public health

Intermediate examinations at the State Examination Commission:
1. Anatomy, 3d semester
2. Histology, 3d semester
3. Physiology, 4th semester
4. Biochemistry, 4th semester

APPENDIX C

Tables

Curriculums for Pedagogical Institutes

Table 13.—Russian language, literature, and history

[This 5-year curriculum is for the following specialist: Secondary school teacher of Russian language, literature, and history. Data from Source C. Course numbers 1–20 are common for all students. Specialists in literature take courses 21L–29L, and those in history, courses 21H–32H]

Subjects	Total	Total hours in program			Hours per week by year and by semester								
					1st year		2d year		3d year		4th year		5th year
		Lectures	Laboratory work	Seminars and practical studies	1st semester 19 weeks	2d semester 17 weeks	3d semester 18 weeks	4th semester 17 weeks	5th semester 19 weeks	6th semester 13 weeks	7th semester 10 weeks	8th semester 17 weeks	9th and 10th semesters 16 weeks
	1	2	3	4	5	6	7	8	9	10	11	12	13
1. History of C.P.S.U	**220**	120		100	4	2	4	2					
2. Political economy	**150**	80		70					2	3	4	2	
3. Dialectical and historical materialism	**140**	70		70							3	3	4
4. Logic	**70**	44		26	2	2							
5. General psychology and growth	**88**	68		20		3	2						
6. Pedagogy	**100**	50		50			3	3					
7. History of pedagogy	**72**	54		18					4				
8. School hygiene	**36**	18		18				2					
9. Special seminar in pedagogy, methods, or psychology (elective)	**36**			36								2	
10. Educational movies	**36**			36					2				
11. Foreign language	**140**			140	2	2	2	2					
12. Physical education	**140**			140	2	2	2	2					
13. Special training	**48**			48	3								
14. Introduction to linquistics	**72**	42		30	2	2							

15. Russian language	612	272		340	2	2	7	8	5	4	4	5	
a. Old Slavonic language	72	42		30	2	2							
b. Historical grammar	90	50		40			3	2					
c. Study of dialects	34	20		14				2					
d. Modern Russian language	416	160		256			4	4	5	4	4	5	
16. Methods of teaching Russian language	100	60		40						5	3		
17. Practical training in expressive reading	72			72	2	2							
18. Introduction to study of literature	60	40		20	3								
19. History of U.S.S.R	390	290		100	4	5	4	4	3	3			
20. Fundamentals of Soviet State and law	76	56		20					2	3			
Specialization in literature	1,670	1,160		510	8	10	8	8	12	18	16	13	14
21. Russian literature	482	356		126	3	3	3	3	4	5	3	3	3
Spoken folk literature	56	38		18	3								
Ancient Russian literature	50	38		12		3							
Literature of the 18th century	56	40		16			3						
Literature of the 19th century	190	130		60				3	4	5			
Literature of the 20th century	30	30									3		
Soviet literature	100	80		20								3	3
22. Foreign literature	252	224		28		2	2	2	2	7	2		
Ancient literature	34	34				2							
Literature of the Middle Ages, Renaissance, and 17th century	36	36					2						
Literature of the 18th century	34	34						2					
Literature of the 19th century	76	60		16					2	3			
Literature of modern times	72	60		12						4	2		
23L. Children's literature	56	36		20					3				
24L. History of Russian literary language	34	34										2	
25L. Methods of teaching literature	70	40		30						4	2		
26L. Special courses for Russian language and literature	200	200									4	4	5
27L. Special seminars for Russian language and literature	200			200							4	4	6
28L. World history	340	250		90	5	5	3	3	3				
29L. Methods of teaching history	36	20		16						2	1		
Specialization in history	1,682	1,194		488	8	10	8	7	9	16	16	17	17
21H. History of the ancient world	160	90		70	4	5							
22H. History of the Middle Ages	176	100		76			5	5					
23H. History of modern times	350	250		100					6	6	6	6	
24H. Modern history of countries of the East	96	70		26									6
25H. Archaeology	38	38			2								
26H. Historiography of U.S.S.R	66	66										2	2
27H. Methods of teaching history	70	40		30						4	2		
28H. Special courses for history	120	120									2	3	3
29H. Special seminars for history	120			120							2	3	3
30H. Russian literature	270	220		50	2	5	3	2	3				
31H. Foreign literature	180	180								4	3	3	3
32H. Methods of teaching literature	36	20		16						2	1		
Total hours in all subjects for students specializing in literature	4,328	2,424		1,904	34	32	32	31	30	36	30	25	18
Total hours in all subjects for students specializing in history	4,340	2,458		1,882	34	32	32	30	27	34	30	29	21

Table 13.—Russian language, literature, and history—Continued

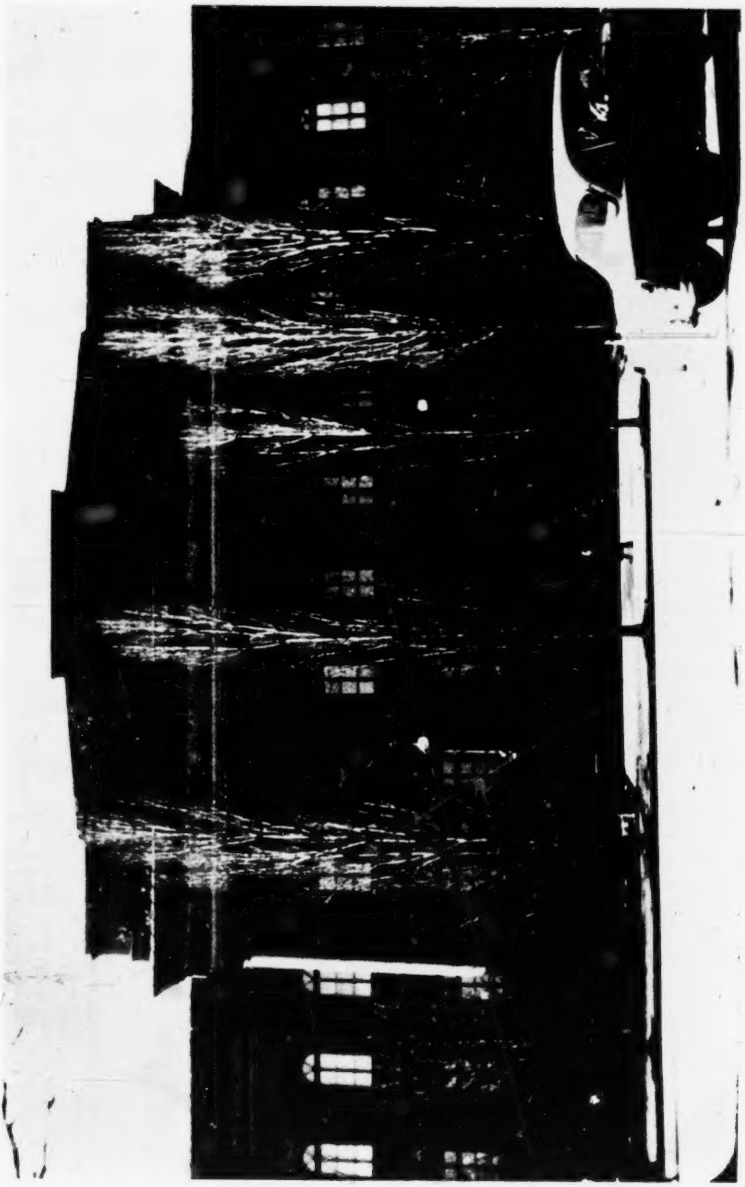
This 5-year curriculum is for the following specialist: Secondary school teacher of Russian language, literature, and history. Data from Source C. Course numbers 1–20 are common for all students. Specialists in literature take courses 21L–29L, and those in history, courses 21H–32H]

Subject	Total	Total hours in program			Hours per week by year and by semester								
					1st year		2d year		3d year		4th year		5th year
		Lectures	Laboratory work	Seminars and practical studies	1st semester 19 weeks	2d semester 17 weeks	3d semester 18 weeks	4th semester 17 weeks	5th semester 19 weeks	6th semester 13 weeks	7th semester 10 weeks	8th semester 17 weeks	9th and 10th semesters 16 weeks
	1	2	3	4	5	6	7	8	9	10	11	12	13
CURRICULUM REQUIREMENTS (IN ABSOLUTE NUMBERS)													
Number of course papers	2							1		1			
Number of examinations	35L 33H				3	5	5L 3H	5	2	5L 4H	4L 3H	4	2L 4H
Number of tests	42L 38H				5L 6H	5L 4H	5L 6H	5	6L 5H	3	5L 4H	3	4L 2H

Optional subjects:	Hours
1. Foreign languages	140
2. Latin	60
3. Contemporary slavic	140
4. History of arts	120
5. Fundamentals of atheism	30
6. Practical training in conducting extracurricula activities	100
7. Improving sports skills	420
8. Choral singing	250
9. Individual instruction in playing musical instruments	250
10. Library training	60

Pedagogical practice:	Semester No.	Weeks
1. Pedagogical practice without interruption of studies	1, 3	8 (300 hrs.)
2. Pedagogical practice in pioneer camps and pupil brigades	3	6
3. Pedagogical practice in school with interruption of studies	4, 5	20
Total		34

State examinations:
1. History of C.P.S.U.
2. Russian language
3. Russian literature or history (depending on specialization)
4. Pedagogy with special methods, or special final work in pedagogy or methods (elective)



Kiev State University

Table 14.—Specialty: Foreign languages

[This 5-year curriculum is for the following specialist: Secondary school teacher of German and English; French and German; or English and French. Data from Source C]

Subjects	Total hours in program				Hours per week by year and by semester								
					1st year		2d year		3d year		4th year		5th year
	Total	Lectures	Laboratory work	Seminars and practical studies	1st semester 20 weeks	2d semester 18 weeks	3d semester 20 weeks	4th semester 18 weeks	5th semester 20 weeks	6th semester 14 weeks	7th semester 12 weeks	8th semester 18 weeks	9th and 10th semester 15 weeks
	1	2	3	4	5	6	7	8	9	10	11	12	13
Total hours	**4,974**	**898**		**4,076**	**34**	**33**	**32**	**32**	**32**	**36**	**32**	**30**	**30**
1. History of C.P.S.U	220	120		100	3	3	3	3					
2. Political economy	150	80		70					2	2	2	3	
3. Dialectical and historical materialism	140	70		70							4	2	4
4. General psychology and growth	88	68		20	1	2	2						
5. Pedagogy	100	50		50			2	3					
6. History of pedagogy	72	54		18					4				
7. School hygiene	36	18		18							2		
8. Special seminar in pedagogy, psychology or methods (elective)	36			36								2	
9. Introduction to linguistics	72	72			2	2							
10. Latin	72			72	2	2							
11. Phonetics of foreign language	420	20		400	6	6	4	4	2				
12. Grammar of foreign language	510	40		470	6	6	5	5	2	2	2		
13. Practical training in speech and writing	1,550			1,550	10	10	12	10	10	11	9	9	8

14. Methods of teaching foreign languages	104	50		54						4	4		
15. Translation	70			70								2	2
16. Lexicology	64	34		30					2	2			
17. History of language	72	52		20			2	2					
18. Literature in the foreign language studied	100	100										2	4
19. Recent history of the country speaking the language studied	40	40								3			
20. Second foreign language	800			800					10	12	9	10	10
21. Audiovisual techniques	70	30		40	2								2
22. Special training	48			48				3					
23. Physical education	140			140	2	2	2	2					

CURRICULUM REQUIREMENTS (IN ABSOLUTE NUMBERS)

Number of course papers	2									1		1	
Number of examinations	26				1	4	1	4	2	4	2	4	4
Number of tests	33				5	3	4	4	4	3	5	3	2

Optional subjects:	Hours
1. Second foreign language	300
2. Third foreign language	300
3. History of the country speaking the language studied	60
4. Geography of the country speaking the language studied	60
5. History of the culture of the country speaking the language studied	40
6. Literature	120
7. Literary style	40
8. Fundamentals of atheism	30
9. Logic	70
10. Practical training in conducting extracurricula activities	100
11. Voice training	60
12. Choral singing	250
13. Individual instruction in playing musical instruments	200
14. Improving sports skills	420
15. Domestic science	250
16. Library training	60

Pedagogical practice:	Semester No.	Weeks
1. Pedagogical practice without interruption of studies		8 (300 hours)
2. Pedagogical practice in pioneer camps and pupil brigades		6
3. Pedagogical practice in school with interruption of studies		20
Total		34

State examinations:
1. History of C.P.S.U.
2. Major foreign language
3. Second foreign language
4. Pedagogy with methods of teaching foreign language or special finals work in pedagogy or methods (elective)

Table 15.—Specialty: Mathematics and physics

[This 5-year curriculum is for the following specialist: Secondary school teacher of mathematics and physics. Data from Source C. Course numbers 1–26 are common for all students; specialists in mathematics take courses 27M–32M, and those in physics, courses 27P–30P. Divided numbers indicate respectively the number of lecture hours and hours of practical training]

Subjects	Total	Total hours in program			Hours per week by year and by semester								
					1st year		2d year		3d year		4th year		5th year
		Lectures	Laboratory work	Seminars and practical studies	1st semester 19 weeks	2d semester 18 weeks	3d semester 18 weeks	4th semester 13 weeks	5th semester 19 weeks	6th semester 17 weeks	7th semester 11 weeks	8th semester 18 weeks	9th and 10th semesters 8/8 weeks
	1	2	3	4	5	6	7	8	9	10	11	12	13
1. History of C.P.S.U.	220	120		100	3	3	3	4					
2. Political economy	150	80		70					2	2	2	3	
3. Dialectical and historical materialism	140	70		70							2	3	4/4
4. General psychology and growth	88	68		20	2	1	2						
5. Pedagogy	100	50		50			3	3					
6. History of pedagogy	72	54		18					4				
7. School hygiene	36	18		18				3					
8. Special seminar in pedagogy methods or psychology (elective)	36			36								2	
9. Mathematical analysis	400	220		180	7	5	5	6					
10. Analytic geometry	170	85		85	5	4							
11. Higher algebra	200	112		88	5	2	4						
12. Theory of numbers	44	32		12							4		
13. Elementary mathematics	360	170	16	174	4	3	2	2	3	2	3	2	
14. Special practical training (mathematical models, surveying, calculation).	92		92							2	2	2	
15. Methods of teaching mathematics	170	70		100						4	4	2	3/0
16. General physics	620	270	200	150		9	9	10	9				
17. Theoretical mechanics	112	56		56					3	3			
18. Electroradio technics with practical training	140	50	90						4	2	3		
19. Practical training in school workshops with elements of technology of materials.	180	30	150					4	3	4			
20. Methods of teaching physics	210	60	100	50						6	4	2	3/0
21. Astronomy	72	54	18						2	2			
22. Educational movies	36		36						2				
23. Mechanical drawing	86	18	68		3	2							
24. Foreign language	140			140	2	2	2	2					
25. Physical education	140			140	2	2	2	2					
26. Special training	48			48	3								

Specialization in mathematics													
27M. Projective and descriptive geometry	**110**	78		32							2	5	
28M. Foundations of geometry	**64**	54		10									6/2
29M. Foundations of arithmetic	**36**	36										2	
30M. Theory of functions of a complex and real variable	**112**	112								4	4		
31M. Algorithms and computing machines	**48**	48											6/0
32M. Special course and special seminar	**132**	42		90								2	6/6
Specialization in physics													
27P. Methods of mathematical physics	**56**	40		16						2	2		
28P. Theoretical physics	**300**	220		80						3	4	6	6/6
29P. Auto-tractor practical training with fundamentals of machine technology.	**130**		130									5	6/0
30 P. Special course and special practical training	**132**	42	90									3	6/4
Total hours for students specializing in mathematics	**4,564**	2,057	770	1,737	36	33	32	36	32	31	30	25	28/12
Total hours for students specializing in physics	**4,680**	1,989	990	1,701	36	33	32	36	32	32	30	30	28/14

CURRICULUM REQUIREMENTS (IN ABSOLUTE NUMBERS)

Number of course papers	2									1		1	
Number of examinations for mathematics specialists		37M			2	5	4	5	3	5	3	5M	5M
Number of examinations for physics specialists		35P										4P	4P
Number of tests for mathematics specialists		46M			6	6	5	6	6	5	6	4	2M
Number of tests for physics specialists		47P											3P

Optional subjects:	Hours
1. Fundamentals of modern algebra	40
2. Functional analysis	40
3. Vector and tensor analysis	40
4. Selected problems of elementary mathematics	40
5. Methods of approximate calculation	40
6. Nuclear physics	40
7. Physics of semiconductors and dielectrics	40
8. Physics of electron phenomena	40
9. Special problems of methods of physics	40
10. Special course in optics	40
11. History of mathematics	40
12. History of physics	40
13. Fundamentals of atheism	30
14. Logic	70
15. Improving automobile or tractor driving	200
16. Foreign language	140
17. Practical training in conducting extracurricular activities	100
18. Improving sports skills	420
19. Choral singing	250
20. Individual instruction in playing musical instruments	250
21. Library training	60

	Semester No.	Weeks
Teaching-production practice:		
Production practice in industrial enterprises	3 5	4 8
Total		12
Pedagogical practice:		
1. Pedagogical practice without interruption of studies (300 hours)	1, 2, 3	8
2. Pedagogical practice in pioneer camps and pupil brigades	2	6
3. Pedagogical practice with interruption of studies	4, 5	20
Total		34

State examinations:
1. History of C.P.S.U.
2. Mathematics (according to special program)
3. Physics (according to special program)
4. Pedagogy with special methods, or special finals work in pedagogy or methods (elective)

Table 16.—Specialty: Geography and biology

[This 5-year curriculum is for the following specialist: Secondary school teacher of geography and biology. Data from Source C]

Subjects	Total	Total hours in program			Hours per week by year and by semesters								
					1st year		2d year		3d year		4th year		5th year
		Lectures	Laboratory work	Seminars and practical studies	1st semester 19 weeks	2d semester 13 weeks	3d semester 18 weeks	4th semester 13 weeks	5th semester 19 weeks	6th semester 12 weeks	7th semester 11 weeks	8th semester 15 weeks	9th and 10th semesters 16 weeks
	1	2	3	4	5	6	7	8	9	10	11	12	13
Total hours	**4,362**	**2,257**	**1,395**	**710**	**36**	**36**	**32**	**32**	**30**	**30**	**30**	**30**	**30**
1. History of C.P.S.U	220	120		100	4	3	3	4					
2. Political economy	150	80		70			2	3	2	3			
3. Dialectical and historical materialism	140	70		70							3	3	4
4. General psychology and growth	88	68		20		4	2						
5. Pedagogy	100	50		50			2	5					
6. History of pedagogy	72	54		18					4				
7. School hygiene	36	18		18				3					
8. Special seminar in pedagogy, methods, or psychology (elective)	36			36								2	
9. Fundamentals of topography and cartography	126	63	63			4	4						
10. Fundamentals of general earth science	224	140	84		6	3	4						
11. Economic geography of the U.S.S.R.	208	140	68							4	3	3	5
12. Physical geography of the U.S.S.R.	220	148	72						4	5	4	3	
13. Physical geography of the parts of the world	200	134	66							6	6	5	
14. Economic and political geography of foreign countries	210	140	70								5	4	6
15. Methods of teaching geography	100	52	48							4	2	2	
16. Chemistry	200	100	100		5	8							
17. Botany	260	130	130		5	4	4	4					
18. Zoology	260	130	130		5	3	4	4					
19. Histology and embryology	58	28	30		3								
20. Physiology of plants	116	64	52						6				
21. Physiology of man and animals	168	90	78								4	4	4

22. Human anatomy	76	38	38						4				
23. Darwinism	64	52	12										4
24. Methods of teaching natural science	100	44	56							4	2	2	
25. Fundamentals of agriculture	110	50	60						4	3			
26. Geology	164	114	50		4	3	3						
27. Fundamentals of soil culture	66	34	32					5					
28. Geography of animal life	38	38							2				
29. Geography of plant life	38	38							2				
30. Practical training in study of local lore	40		40								1	2	
31. Special course (elective)	30	30											2
32. Special practical training (elective)	80		80										5
33. Educational movies	36		36					2					
34. Foreign language	140			140	2	2	2	2					
35. Physical education	140			140	2	2	2						
36. Special training	48			48					2	1			

CURRICULUM REQUIREMENTS (IN ABSOLUTE NUMBERS)

Number of course papers	2									1			
Number of examinations	38				4	4	5	5	3	4	3	5	5
Number of tests	46				6	6	5	5	5	5	5	5	4

Optional subjects:	Hours
1. History of geographic discoveries	40
2. Geography of population	40
3. History of national economy of the U.S.S.R.	80
4. Economic cartography	38
5. Astronomy	60
6. Methods of geographical field observation	40
7. Ethnography	40
8. Ecology of plants	40
9. Ecology of animals	40
10. Conservation	30
11. Fundamentals of atheism	30
12. Logic	70
13. Practical training in private animal husbandry	40
14. Practical training in floriculture	40
15. Practical study of agricultural machinery	60
16. Apiculture	40
17. Construction of visual aids	60
18. Sketching	40
19. Improving sports skills	420
20. Practical training in conducting extracurricular activities	100
21. Foreign language	140
22. Choral singing	250
23. Individual instruction in playing musical instruments	250
24. Library training	60

	Semester No.	Weeks
Teaching-production practice:		
1. Teaching-field and production practice	1	7
	2	7
	3	9
	4	5
Total		28
Pedagogical practice:		
1. Without interruption of studies	2, 3	8 (300 hrs.)
2. With interruption of studies	4, 5	20
Total		28

State examinations:
1. History of C.P.S.U.
2. Physical and economic geography of the U.S.S.R.
3. Botany or zoology (elective)
4. Pedagogy with special methods, or special finals; work in pedagogy or methods (elective)

Table 17.—Specialty: Physical education

[This 4-year curriculum is for the following specialist: Secondary school teacher of physical education. Data from Source C. Figures in parentheses indicate practical training in given subjects during periods of pedagogical practice]

Subjects	Total	Total hours in program			Hours per week by year and by semesters							
					1st year		2d year		3d year		4th year	
		Lectures	Laboratory work	Seminars and practical studies	1st semester 19 weeks	2d semester 12 weeks	3d semester 18 weeks	4th semester 13 weeks	5th semester 18 weeks	6th semester 10 weeks	7th semester 18 weeks	8th semester 12 weeks
	1	2	3	4	5	6	7	8	9	10	11	12
Total hours	**3,171** **(726)**	**1,032** **(70)**	**357**	**1,782** **(656)**	**33**	**38**	**38**	**38**	**38**	**38**		**38**
1. History of C.P.S.U	220	120		100	3	4	3	4			Pedagogical practice.	
2. Political economy	150	80		70			2	3	2	4		
3. Dialectical and historical materialism	140	70		70					2	4		5
4. General psychology and growth	88	68		20		4	2					
5. Hygiene general and of physical exercises	124	60	26	38			2	2	2			
6. Pedagogy	100	50		50			3	3				
7. History of pedagogy	72	54		18					2	4		
8. Educational movies	36		36						2			
9. Theory and methods of physical education	146	64		82				4	4	2		
10. Special seminar in pedagogy methods or psychology (elective).	36			36								3
11. Chemistry	100	50	50		3	4						
12. Human anatomy	160	60	100		6	4						
13. Human physiology	190	100	90				4	4	4			
14. Medical supervision and physical therapy	115	60	55							4		6
15. History and organization of physical culture	72	50		22								
16. Gymnastics with methods of teaching:												
a. In theoretical instruction	400	30		370	4	4	4	2	4	4		6
b. During annual training camp	(12)	(4)		(8)								
17. Musical and rhythmic training	82			82	4							
18. Light athletics with methods of teaching:												
a. In theoretical instruction	150	30		120	2		2		2	4		
b. During annual training camp	(194)	(10)		(184)								

19. Athletic games with methods of teaching:												
a. Theoretical instruction	350	30		320	4	4	2	4	2	4		4
b. During annual training camp	(64)	(10)		(54)								
20. Active games with methods of teaching:												
a. Theoretical instruction	60	14		46				2	2			
b. During annual training camp	(18)	(4)		(14)								
21. Skiing with methods of teaching:												
a. Theoretical instruction	38	20		18					2			
b. During annual training camp	(204)	(10)		(194)								
22. Skating with methods of teaching	90	12		78	2	2	2					
23. Swimming with methods of teaching:												
a. Theoretical instruction	64	10		54		2	2					
b. During annual training camp	(114)	(10)		(104)								
24. Excursion training:												
a. During annual training camp	(40)	(22)		(18)								
b. Excursion	(80)			(80)								
25. Foreign language	140			140	2	2	2	2				
26. Special training	48			48	3							

CURRICULUM REQUIREMENTS (IN ABSOLUTE NUMBERS)

Number of course papers	2									1		1
Number of examinations	23 (2)				1	3	2	5	3	4 (2)		5
Number of tests	36 (14)				6	6 (4)	5	6 (5)	5	4 (5)		4

Optional subjects:	Hours
1. Practical training in improving sports skills 6 hours/week (for 1st-class athletes, 9 hours/week)	900
2. Practical training in conducting extracurricula activities	100
3. Choral singing	250
4. Individual instruction in playing musical instruments	250
5. Practical training in cinema and photography	80
6. Figure skating	70
7. Rowing	40
8. Bicycle racing	60
9. Automobile racing	100
10. Shooting	60
11. Fencing	60
12. Mass folk and ballroom dancing	100
13. Library training	60

Annual training camps and excursions:	
1. Winter, 1st year	3 weeks or 102 hours
2. Summer, 1st year	6 weeks or 204 hours
3. Winter, 2d year	3 weeks of 102 hours
4. Summer, 2d year	4 weeks or 136 hours
5. Summer, 2d year	10 days or 80 hours
6. Summer, 3d year	3 weeks or 102 hours

Pedagogical practice:	Semester No.	Weeks
1. Pedagogical practice without interruption of studies	1, 2, 3	10 (400 hrs.)
2. Pedagogical practice in school with interruption of studies	3, 4	24
3. Pedagogical practice in pioneer camps	3	4
Total		38

State examinations:
1. History of C.P.S.U.
2. Theory and methods of physical education
3. Pedagogy

Table 18.—Specialty: Pedagogy and methods of primary education

[This 4-year curriculum is for the following specialist: Teacher of grades 1–4. Data from Source C]

Subjects	Total	Total hours in program			Hours per week by year and by semesters							
					1st year		2d year		3d year		4th year	
		Lectures	Laboratory work	Seminars and practical studies	1st semester 20 weeks	2d semester 17 weeks	3d semester 19 weeks	4th semester 15 weeks	5th semester 20 weeks	6th semester 10 weeks	7th semester 19 weeks	8th semester 6 weeks
	1	2	3	4	5	6	7	8	9	10	11	12
Total hours	**4,318**	**1,388**	**62**	**2,468**	**36**	**36**	**36**	**36**	**36**	**36**	**30**	**24**
1. History of C.P.S.U.	160	88		72	4	3	2					
2. Political economy	90	68		22				2	2	2		
3. Dialectical and historical materialism	140	70		70						4	4	4
4. Anatomy and physiology of children of early school age with fundamentals of school hygiene.	154	114	40		6	2						
5. Psychology (general and of children of early school age).	140	80	60			2	4	2				
6. Pedagogy	168	100		68		3	3	4				
7. History of pedagogy	100	60		40							4	4
8. Russian language	362	122		240	4	4	3	4	2	2	2	
9. Literature (general and children's)	220	180		40					4	4	4	4
10. Mathematics	256	90		166	4	4	2	2	2			
11. Methods of teaching natural history (fundamentals of natural science and geography).	100	30	70					3	2	2		
12. Practical training in workshop with methods of teaching manual labor.	262	40	222		4	4	6					
13. Educational movies	40			40					2			
14. Special training	48			48							2	2
15. Foreign language	140			140	2	2	2	2				
16. Methods of Russian language with methods of penmanship and expressive reading.	170	80		90			2	3	2	4		
17. History of U.S.S.R. with methods of teaching history.	150	116		34					4	4	2	

18. Methods of arithmetic	90	60	......	30	......	......	......	2	2	2	......	......
19. Singing and music with methods of teaching grades 1-4.	242	30	......	212	2	2	2	2	2	2	2	
20. Drawing with methods of teaching grades 1-4	232	30	......	202	2	2	2	2	2	2	2	......
21. Logopedics (study of speech defects)	40	......	......	40	......	......	......	......	2	......	......	......
22. Physical education with methods of teaching grades 1-4.	182	30	......	152	2	2	2	2	2	......	......	......
23. Special seminar in pedagogy, psychology, or methods (elective).	70	......	70	......	......	......	......	......	......	2	2	
24. Pedagogical practice without interruption of studies.	762	......	......	762	6	6	6	6	6	6	6	

CURRICULUM REQUIREMENTS (IN ABSOLUTE NUMBERS)

Number of course papers	2	......	......	......	......	......	......	......	......	1	......	......
Number of examinations	23	......	......	......	2	2	3	4	1	5	3	3
Number of tests	37	......	......	......	4	6	4	6	7	5	2	3

Optional subjects:	Hours
1. Russian and foreign literature	80
2. Logic	70
3. Fundamentals of atheism	30
4. Foreign language	160
5. Drawing and modeling	250
6. Choral singing	250
7. Individual instruction in playing musical instruments	250
8. Improving sports skills	420
9. Domestic Science	80
10. Automobile training	150
11. Library training	60

Pedagogical practice:	Semester No.	Weeks
1. Pedagogical practice without interruption of studies	1, 4	21 (762 hours)
2. Socially useful labor in city with pupils	1	4
3. Socially useful labor in agriculture with pupils	2	4
4. Pedagogical practice in pioneer camps	3	6
5. Pedagogical practice in primary school	4, 5	9
6. Pedagogical practice in first class (First day of a child in school)	4	1
Total		45

State examinations

1. History of C.P.S.U.
2. Russian language with methods of teaching in primary grades
3. Pedagogy with special methods of final work in pedagogy or methods (elective)

APPENDIX D

Tables

Curriculums for Engineering-Technical Higher Schools

Table 19.—Specialty: Mine surveying

[This curriculum of 5 years, 4 months is for the following specialist: Mining engineer-surveyor. Data from Source D. Divided numbers indicate respectively number of lecture hours and hours of practical training]

Subjects	Total	Total hours in program				Hours per week by year and by semester										
						1st year		2d year		3d year		4th year		5th year		6th year
		Lectures	Laboratory work	Practical studies	Seminars course projects and assignments	1st semester 4/14 weeks	2d semester 17 weeks	3d semester 18 weeks	4th semester 17 weeks	5th semester 18 weeks	6th semester 17 weeks	7th semester 18 weeks	8th semester 17 weeks	9th semester 10 weeks	10th semester 10 weeks	11th semester 22 weeks
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Total hours	**4,700**	**2,418**	**689**	**1,302**	**289**	**36/12**	**12**	**12**	**36**	**36**	**36**	**36**	**36**	**36**	**30**	**8**
1. History of C.P.S.U.	150	80			70	4/1	1	1	2	3						
2. Political economy	150	70			80						4	2	3			
3. Dialectical and historical materialism	90	50			40									6	3	
4. Economics of industry	50	50												5		
5. Organization and planning of enterprises.	104	60		22	22										6	2
6. Foreign language	249			249		2/1	1	2	2	2	2	2	2			
7. Higher mathematics	455	250	18	187		8/3	4	3	8	4	3					
8. Descriptive geometry and mechanical drawing.	221	36		185		3/1	1	1	2	2	2	2				
9. Technology of mining production	66	31		35		6/3										
10. General chemistry	125	65	60			8/3	3									

11. Geology and mineral resource deposits	354	233	50	71			2	2		10	4	2				
12. Physics	315	159	106	50				3	6	6	3					
13. Theoretical mechanics	122	69		53					4	3						
14. Physical education	140			140					2	2	2	2				
15. Geodesy	335	195	87	35	18				7			6	4	4		
16. Resistance of materials	123	70	18	35						4	3					
17. General electrotechnics	157	104	36	17							5	4				
18. Mining of mineral resource deposits	225	156	17	35	17						8	4	1			
19. Mine surveying	351	202	88	39	22							6	7	4	4	2
20. Theory of errors and minimal-square method.	108	72	18	18								6				
21. Geometry of mineral resources	226	100	70	36	20								8	2	4	2
22. Fundamentals of mining transport and mechanics.	85	68	17										5			
23. Mining ventilation	51	34	17										3			
24. Fundamentals of industrial electronics	51	34	17										3			
25. Photogrammetry	30	20	10											3		
26. Mine surveying-Geodetic devices and instruments.	70	50	20											7		
27. Computing machines and programing	50	30	20											5		
28. Fundamentals of automatics and automatization of production processes.	82	50	10	22											6	1
29. Fundamentals of mine safety and fire prevention techniques.	52	30		22											3	1
30. Use of atomic energy in the national economy.	40	30	10												4	
31. Additional training	51			51					3							
Number of course papers	4												1	1	1	1
Number of course assignments	1															1
Number of examinations	43					2	2	4	5	5	5	5	5	4	4	2
Number of tests	52					4	4	3	5	6	6	6	6	5	4	3

Optional subjects:	Semester No.	Hours
1. Physical education	4–10	300
2. Fundamentals of Marxist-Leninist ethics	7	32
3. Fundamentals of Marxist-Leninist esthetics	8	32
4. Fundamentals of scientific atheism	9	20
5. Fundamentals of labor law	10	20

Practice training:	Semester No.	Weeks
1. Geodesy	4	4
2. Photogrammetry	10	2
Production practice:		
Mine surveying	11	22
Diploma project or diploma work:		
Defense of diploma project at State Examination Commission		

Table 20.—Specialty: Technology of basic organic synthesis and synthetic rubber

[This curriculum of 5 years, 4 months is for the following specialist: Engineer-technologist. Data from Source D. Divided numbers indicate respectively number of lecture hours and hours of practical training]

Subjects	Total hours in program					Hours per week by year and by semesters											
						1st year		2d year		3d year		4th year		5th year		6th year	
	Total	Lectures	Laboratory work	Practical studies	Seminars, course projects and assignments	1st semester 4/14 weeks	2d semester 17 weeks	3d semester 18 weeks	4th semester 17 weeks	5th semester 18 weeks	6th semester 17 weeks	7th semester 18 weeks	8th semester 17 weeks	9th semester 10 weeks	10th semester 10 weeks	11th semester 22 weeks	12th semester 0 weeks
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Total hours	**4,700**	**2,064**	**1,400**	**935**	**301**	**36/12**	**12**	**12**	**36**	**36**	**36**	**36**	**36**	**36**	**30**	**8**	
1. History of C.P.S.U	150	80			70	4/1	1	1	2	3							
2. Political economy	150	70			80						4	2	3				
3. Dialectical and historical materialism.	90	50			40									6	3		
4. Economics of industry	50	50												5			
5. Organization and planning of enterprises.	104	60		22	22										6	2	
6. Foreign language	245			245		2/2	2	2	2	2	2	1	1				
7. Higher mathematics	404	194	18	192		8/3	4	3	4	4	4						
8. Descriptive geometry and machine-building mechanical drawing.	146	36		110		8/2	2	1	2								
9. Technology of production	38	38				6/1											
10. Inorganic chemistry	195	90	105			8/3	3	2	2								
11. Physics	315	159	106	50				3	6	6	3						
12. Physical education	140			140					2	2	2	2					
13. Theoretical mechanics	102	68		34					6								
14. Analytical chemistry	318	30	283						7	7			4				
15. Resistance of materials	105	54	17	34						3	3						
16. General electrotechnics	105	70	35							3	3						
17. Organic chemistry	302	104	198							6	4	7					

18. Physical chemistry	245	85	160								7	7					
19. General thermotechnics	122	68	36		18						4	3					
20. Machine components and hoisting-transport principles.	107	72		18	17							5	1				
21. Fundamentals of industrial electronics.	54	36	18									3					
22 New materials and techniques.	54	36	18									3					
23. Fundamentals of chemical technology.	105	70	35									3	3				
24. Colloidal chemistry	85	40	45										5				
25. Computing machines and programming.	51	34	17										3				
26. Processes and apparatus of chemical technology.	192	100	65	17	10								6	8	1		
27. Fundamentals of automatics and automatization of production processes.	102	60	20		22									4	4	1	
28. Fundamentals of safety and fire prevention techniques.	42	20		22											2	1	
29. Fundamentals of construction and sanitation techniques.	44	44														2	
30. Theory of technological processes.	68	68											4				
31. Chemistry and technology of basic organic synthesis.	234	78	134										6	6	5	1	
32. Chemistry and technology of synthetic rubber.	140	50	90		22									7	7		
33. Equipment of plants of basic organic synthesis and synthetic rubber.	42	42													2	1	
34. Additional training	51			51					3								
Number of course papers	3												1		1	1	
Number of course assignments	3											1				2	
Number of examinations	41					2	2	3	5	5	5	4	5	4	4	2	
Number of tests	47					4	2	3	6	6	6	6	5	3	3	3	

Optional subjects:	Semester No.	Hours
1. Physical education	4, 10	300
2. Fundamentals of Marxist-Leninist ethics	7	32
3. Fundamentals of Marxist-Leninist esthetics	8	32
4. Fundamentals of scientific atheism	9	20
5. Fundamentals of labor law	10	20

Production practice:	Semester No.	Weeks
Technology	11	22
Diploma project or diploma work:		
Defense of diploma project at State Examination Commission.		

Table 21.—Specialty: Industrial and civil construction

[This curriculum of 5 years, 4 months is for the following specialist: Construction engineer. Data from Source D. Divided numbers indicate respectively number of lecture hours and hours of practical training]

Subjects	Total	Total hours in program				Hours per week by year and by semesters										
						1st year		2d year		3d year		4th year		5th year		6th year
		Lectures	Laboratory work	Practical studies	Seminars, course projects and assignments	1st semester 14 weeks	2d semester 17 weeks	3d semester 18 weeks	4th semester 17 weeks	5th semester 18 weeks	6th semester 17 weeks	7th semester 18 weeks	8th semester 17 weeks	9th semester 10 weeks	10th semester 10 weeks	11th semester 22 weeks
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Total hours	**4,780**	**2,653**	**607**	**1,118**	**402**	**36/12**	**12**	**12**	**36**	**36**	**36**	**36**	**36**	**36**	**30**	**12**
1. History of C.P.S.U.	150	80			70	4/1	1	1	2	3						
2. Political economy	150	70			80						4	2	3			
3. Dialectical and historical materialism	90	50			40									6	3	
4. Economy of construction	50	50												5		
5. Technology and organization of construction.	168	114		22	32											
6. Foreign language	245			245		2/2	2	2	2	2	2	1	1			
7. Higher mathematics	455	250	18	187		8/3	4	3	8	4	3					
8. General chemistry	125	65	60			8/3	3									
9. Descriptive geometry, mechanical and free-hand drawing.	199	52		147		8/2	2	3	3							
10. Fundamentals of construction	38	38				6/1										
11. Physics	315	159	106	50				3	6	6	3					
12. Theoretical mechanics	190	100	18	72					4	3	4					
13. Geodesy	68	51	17						4							
14. Building materials	88	53	35						2	3						

15. Physical education	140			140					2	2	2	2			
16. Resistance of materials and fundamentals of tension and plasticity theory.	229	137	35	57						5	5	3			
17. General thermotechnics, gas heat supply and vertilation.	88	53	18		17					3	2				
18. Technology of metals and welding	68	34	34								4				
19. New materials and techniques	51	34	17								3				
20. Construction mechanics	215	107		108								5	5	4	
21. General electro-technics	108	72	36									6			
22. Fundamentals of hydraulics, water supply and drainage.	72	52	10		10							4			
23. Engineering geology	54	36	18									3			
24. Use of atomic energy in national economy.	36	26	10									2			
25. Mechanics of soil and foundations	98	78	10		10								4	3	
26. Fundamentals of industrial electronics	34	24	10										2		
27. Computing machines and programing	51	34	17										3		
28. Construction machines, including machine components.	152	91	44	17									4	2	2	2
29. Fundamentals of automatics and automatization of construction industry processes.	106	62	22		22										4	3
30. Fundamentals of safety and fire prevention techniques.	42	20		22											2	1
31. Special course (elective)	62	52			10										4	1
32. Subjects of the specialization	792	609	72		111					5	4	8	14	12	11	1
33. Additional training	51			51					3							
Number of course papers	10										1	1	1	3	2	2
Number of course assignments	5									1	1	1	1			1
Number of examinations	45					2	3	3	5	5	5	5	5	5	5	2
Number of tests	52					4	3	3	6	5	6	6	6	5	4	4

Optional subjects:	Semester No.	Hours
1. Physical education	4, 10	300
2. Fundamentals of Marxist-Leninist ethics	7	32
3. Fundamentals of Marxist-Leninist esthetics	8	32
4. Fundamentals of scientific atheism	9	20
5. Fundamentals of labor law	10	20

Production practice:	Semester No.	Weeks
Technology	11	22

Diploma project or diploma work:
Defense of diploma project at State Examination Commission.

36
70
32
230
309300

A poster 20 feet high in a permanent public exhibit in Alma Ata (capital of the Kazakh Republic) displays Soviet education statistics. The Kazakh Republic of the U.S.S.R. is cited in the poster as having enrollments, in higher education of 70 per 10,000, compared with 36 for France and 32 for Italy.

PART II

Schools and Statistics

Planning and Supervision

The 739 higher educational institutions of the Soviet Union, their 146,900 staff members, and 2,395,500 students[1] are subject to planning and control by the central Communist Party and the Soviet Government. As demonstrated in the 1958 educational reform, the Communist Party in Moscow initiates major changes for the education system throughout the country and issues policy statements coordinately with the U.S.S.R. Council of Ministers, the central government executive body. The U.S.S.R. Supreme Soviet, the central Soviet legislative body, then issues education laws based on joint decisions of the Communist Party and Council of Ministers. The Supreme Soviets of the 15 constituent republics follow with laws for the educational programs in each republic closely modeled on the law issued by the central legislative body. On the whole, the wording of the local laws is identical with that of the central law, with minor variation according to local conditions.

Central planning and operational control are implemented through a Communist Party and Government executive hierarchy which form a chain of command from Moscow to each higher educational institution. The Party chain extends downward from the Central Committee's Section for Science, Higher Educational Institutions and Schools, through equivalent sections in the 15 republics, to Party offices located within each higher school.

The Government hierarchy extends from the Ministry of Higher and Secondary Specialized Education, U.S.S.R. Council of Ministers, through the 15 republic ministries and committees concerned with

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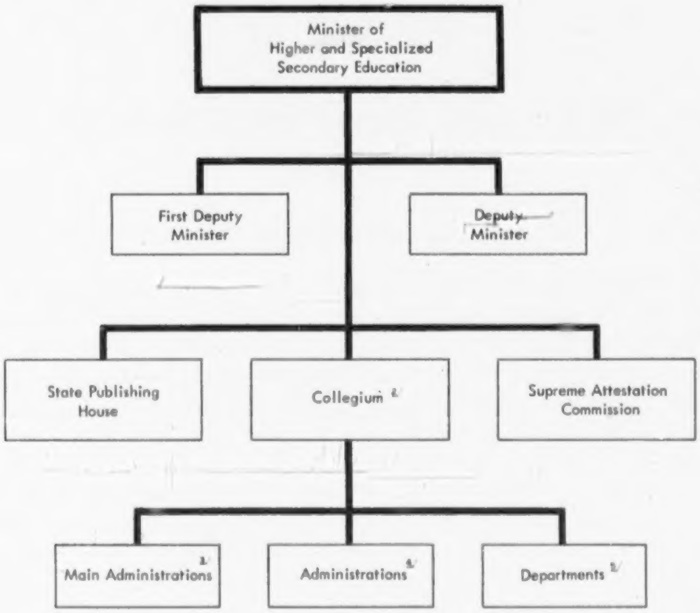
[1] These statistics are reported in official Soviet sources for the school year 1960–61 and do not include *Peoples' Friendship University Named for Patrice Lumumba*, established in 1960 especially for the training of foreign students from Asia, Africa, and Latin America. A recently released publication of the Russian S.F.S.R. Ministry of Education, *Public Education in the Soviet Union*, Moscow, 1962, cites data for the 1961–62 school year; 731 higher schools in the U.S.S.R., with an enrollment of 2,640,000 students. This paper utilizes the more detailed data for the 1960–61 school year (see app. A).

CHART II.—PROJECTED ADMINISTRATIVE STRUCTURE OF THE MINISTRY OF HIGHER AND SPECIALIZED SECONDARY EDUCATION, U.S.S.R.


Minister of Higher and Specialized Secondary Education
First Deputy Minister
Deputy Minister
State Publishing House
Collegium[2]
Supreme Attestation Commission
Main Administrations[3]
Administrations[4]
Departments[5]

[1] See p. 81 for list of ministries and committees administering higher education in the 15 Soviet union-republics.

[2] Composed of the minister, deputy ministers, and heads of main administrations, administrations, and departments.

[3] Such as Polytechnical and Machine Building, Higher Institutions, and Secondary Specialized Educational Institutions.

[4] Such as the Training Methods Administration.

[5] Such as the Foreign Relations Division.

SOURCE: A full description of the administrative apparatus in Soviet education will appear in a forthcoming Office of Education bulletin by Herbert C. Rudman, *Structure and Decision-Making in Soviet Education*.

higher education, and laterally through the government ministries actually supervising the higher schools.

The annual budget of each higher educational institution is decided by the central government within the framework of total state expenditures for the whole Soviet economy. Appropriation requests are submitted by the individual higher school through local government channels, and appropriations are authorized within the framework of the budget for the constituent republic's Council of Ministers.

According to Rektor Sadykov, president of the Central Asian

Table A.—Total State budget expenditures, and expenditures for specified education categories: U.S.S.R., 1961, 1962, and 1963

[The Soviet State budget for 1963 was announced in the Soviet press in December 1962; although the breakdown of the planned educational expenditures is not complete, available data are presented below, along with data for 1961 and 1962]

Budget category	Billions of rubles		
	1961 (announced December 1960)	1962 (announced December 1961)	1963 (announced December 1962)
Total State budget expenditures	**77.5**	**80.3**	**86.1**
Education, training of cadres, science and culture, total	11.3	12.4	13.8
General education	3.5	[1] [4.3]	4.0
Preschool institutions (nurseries, kindergartens)	1.2	1.4	1.6
Boarding and extended day schools	.6	.6	.7
Higher educational institutions and technical schools	[2] 2.2	[2] 1.8	[2] 2.7
Scientific research and science	3.8	4.3	4.7

[1] This figure has been derived as a residual; it may include vocational as well as general education.

[2] The 1961 figure of 2.2 billion rubles includes vocational schools. The 1.8 billion figure for 1962 is not announced as including vocational schools. U.S.S.R. Minister of Finance, V. F. Garbuzov, stated (*Izvestia*, Dec. 7, 1961) that expenditures for higher educational institutions and technical schools for 1962 would be 7.9 percent *higher* than in 1961. The 1963 figure of 2.7 billion rubles apparently includes vocational schools.

University in Tashkent (October 1961), Soviet universities are richly financed by the State, receiving all the support necessary for their programs. The higher schools receive additional funds by fulfilling orders from government ministries and local industrial establishments for applied research. As much as half of each higher school budget is devoted to research.

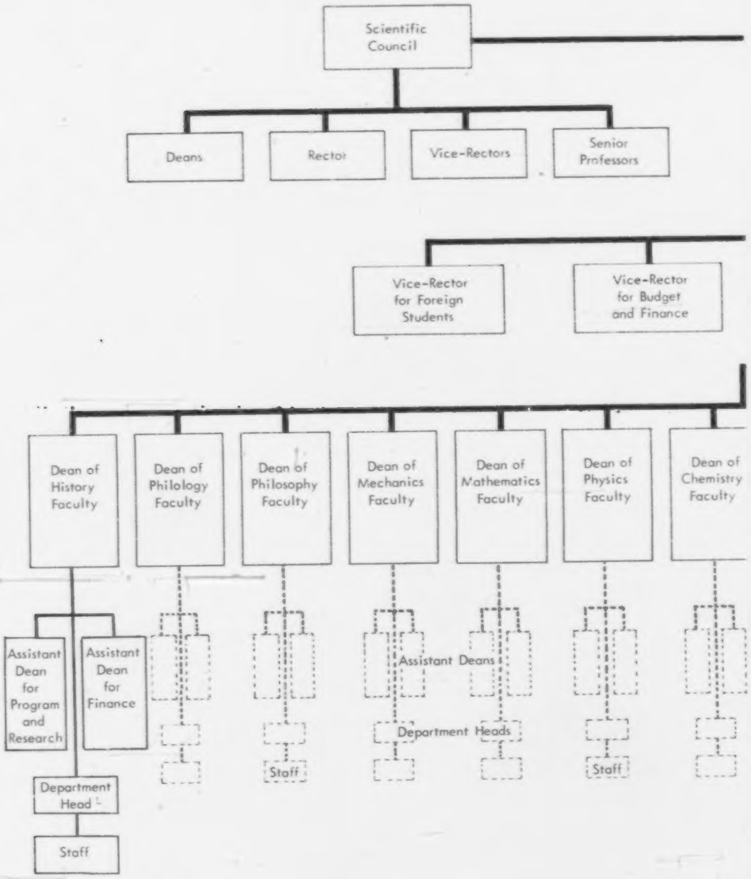
Soviet expenditures for higher education within the total state budgets are itemized separately in more detailed Soviet statistics published after annual expenditures have been completed and tabulated (see table B).

The published Soviet higher education budget for the past 3 years combined, in Soviet reporting, with secondary specialized education expenditures, is shown in table A, in the context of total annual budget expenditures.

In 1960, general education and higher and technical training of specialists (all items listed under sections 1 and 3 of "enlightenment total" in table B) consumed 10.2 percent of the Soviet State budget expenditures. Higher education was 1.6 percent of the total expenditures. Presumably, research in higher schools is included in section 3, subsection a (table B), the budget for higher educational institutions, while research in scientific institutes is included in section 4, the budget for science. A certain percentage of the latter, involving graduate training, should be included as an educational expenditure.

It should be noted that the Soviet annual expenditure for "enlightenment" covers not only regular education facilities, but construction and operation of youth centers, clubhouses, recreation rooms, summer

CHART III.—ADMINISTRATIVE STRUCTURE


Scientific Council
Deans
Rector
Vice-Rectors
Senior Professors
Vice-Rector for Foreign Students
Vice-Rector for Budget and Finance
Dean of History Faculty
Dean of Philology Faculty
Dean of Philosophy Faculty
Dean of Mechanics Faculty
Dean of Mathematics Faculty
Dean of Physics Faculty
Dean of Chemistry Faculty
Assistant Dean for Program and Research
Assistant Dean for Finance
Department Head[1]
Staff
Assistant Deans
Department Heads
Staff
Staff

[1] In 1962, the university reported that it had 200 departments.

SOURCE: From a forthcoming Office of Education bulletin by Herbert C. Rudman, *Structure and Decision-Making in Soviet Education.*

OF MOSCOW STATE UNIVERSITY

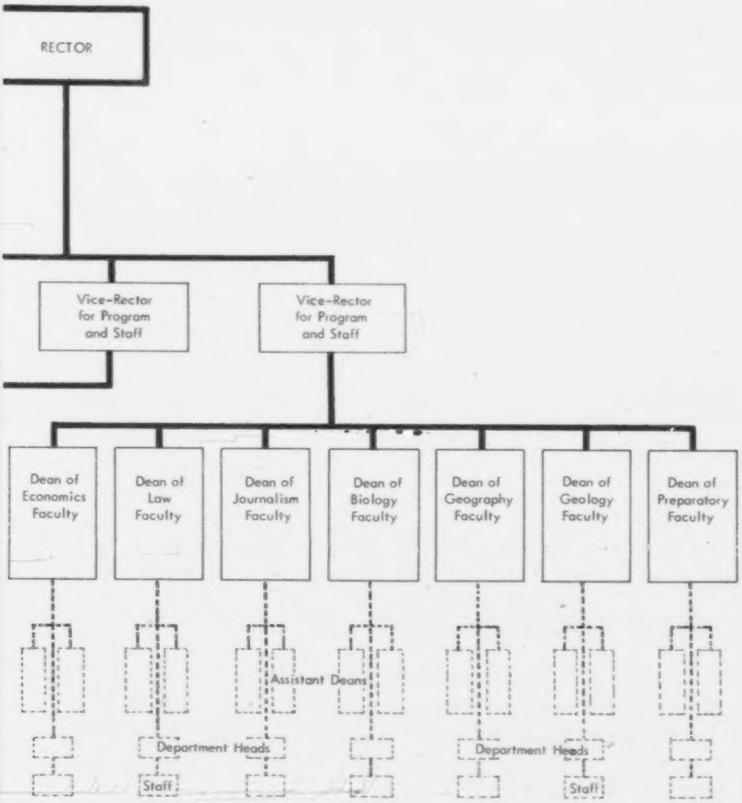

RECTOR
Vice-Rector for Program and Staff
Vice-Rector for Program and Staff
Dean of Economics Faculty
Dean of Law Faculty
Dean of Journalism Faculty
Dean of Biology Faculty
Dean of Geography Faculty
Dean of Geology Faculty
Dean of Preparatory Faculty
Assistant Deans
Department Heads
Department Heads
Staff
Staff

Table B.—Total State budget expenditures and expenditures budgeted for enlightenment: U.S.S.R., 1955 and 1958–61

[Data for 1955–60 are from *Narodnoe khoziaistvo v 1960 godu* (National Economy in 1960), statistical yearbook published by the Central Statistical Administration attached to the U.S.S.R. Council of Ministers, Moscow 1961 p. 846–847. The 1961 data, from the yearbook for 1961 published in 1962, became available after completion of the text, but the general comments apply]

Budget category	Millions of rubles				
	1955	1958	1959	1960	1961
Total State budget expenditures	**54,000 (100%)**	**64,300 (100%)**	**70,400 (100%)**	**73,100 (100%)**	**76,300 (100%)**
Total social-cultural expenditures	14,717 (27%)	21,418 (33%)	23,118 (33%)	24,937 (34%)	27,187 (36%)
Enlightenment [1] total (included in preceding line)	6,894 (13%)	8,603 (13%)	9,412 (13%)	10,323 (14%)	11,349 (15%)
1. General education and education of children and youth, and general adult education, total	3,354	3,979	4,435	5,002	5,606
a. Kindergartens	*361*	*525*	*600*	*607*	*824*
b. Children's homes and boarding schools for deaf and blind children	*286*	*306*	*315*	*306*	*290*
c. General education schools of all types	*2,520*	*2,779*	*2,998*	*3,262*	*3,599*
2. Cultural-educational work	253	318	328	333	336
3. Training cadres, total	2,326	2,352	2,389	2,420	2,532
a. Higher educational institutions	*1,021*	*1,141*	*1,162*	*1,167*	*1,208*
b. Technicums and schools for training of cadres of secondary qualification	*592*	*541*	*525*	*527*	*552*
c. Trade and railroad schools	*166*	*187*	*290*	*302*	*312*
d. Factory schools	*90*	*68*	*55*	*24*	
e. Technical schools	*40*	*69*	*73*	*65*	*90*
f. [Other] factory, trade, and mechanical schools, schools for mechanization of agriculture	*305*	*290*	*277*	*256*	*252*
4. Science	825	1,696	2,004	2,339	2,679
5. Press	62	88	88	74	75
6. Art and radio	74	129	122	105	90

[1] The Russian word "prosveshchenie" is translated here as "enlightenment." Soviet sources translate it as "education," leading to a conceptual error and overstatement of the total education budget."

camps, public libraries and reading rooms, art exhibits, theaters and cinemas, radio stations, and newspapers. *The annual expenditure for these cultural and communications activities should not be included in the Soviet "education" total in comparisons with formal U.S. educational expenditures. If these activities are included in the Soviet education total, then comparable items should be added in totaling U.S. educational expenditures.*

A recent DeWitt study [2] cites items which might be added to Soviet expenditures:

> The budgetary allocation of funds for education is necessarily lower than the total amount spent on education in the Soviet Union. It does not include additional funds from other sources, such as contributions from collective farms, trade unions, and funds of industrial enterprises, or payments collected from individuals as fees for nursery schools, boarding schools, tuition fees (during the 1940–55 period), and personal contributions from parents toward students' room and board. If these additional sources of funds are added, the total educational expenditures would be substantially higher than indicated by the national budget.

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[2] Nicholas DeWitt, in the 1961 National Science Foundation (NSF) study, *Education and Professional Employment in the U.S.S.R.*, p. 63.

DeWitt concludes that "all indications are that at the present time the U.S.S.R. spends substantially more than 5 percent of its GNP on education." The NSF publication further notes that "One Western estimate places this figure as high as 8 percent."[3]

Education costs as a percentage of the total State budget are not to be confused with education costs as a percentage of the gross national product (GNP), which are lower. The Organization for Economic Cooperation and Development (OECD), in a January 1962 publication,[4] estimates that Soviet current expenditures on education for the base year (1958) were 3.2 percent of the GNP, and projects a low of 4.2 percent and a high of 5.0 percent in 1970.

It is evident that different frames of reference have been used in these varying estimates and that the higher estimates of Soviet expenditures are based on inclusion of the additional items cited above. The OECD study would appear to be most nearly an attempted estimate of comparable U.S.S.R.–U.S. education expenditures.

Expenditures for education in the United States, specifically for higher education, are indicated in the following three tables from 1962 publications of the U.S. Office of Education. Table C is from *Biennial Survey of Education in the United States, Statistical Summary of Education: 1957–58*, page 10; table D, from *Progress of Public Education in the United States of America, 1961–62*, page 56; and table E, from *Economics of Higher Education*, page 306.

The logistics of training and distribution of specialists in the higher schools is the responsibility of the U.S.S.R. State Planning Committee (*Gosplan*), a constituent body of the Council of Ministers, and of the republic State Planning Committees subordinate to it. *Gosplan* is concerned with graduation of specialists in adequate numbers to meet the current and projected Soviet economic development plans, which control the admissions pattern for various specialties in higher education, or the student quota system. In accordance with overall national plans and those for each republic, each of the higher schools is directed as to the number of students to be admitted in each field.

Students in Soviet higher schools in this context are considered as means of production, just as are industrial plant and capital equipment. This considerable effort of the Soviet State to train specialists may be viewed as another facet of its concentration on building the productive base of society, in conformity to the basic tenets of Marxist theory.

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[3] U.S. Department of State, "*U.S./Versus Soviet Spending for Major GNP Categories*," Intelligence Information Brief, No. 8, February 24, 1959, p. 3 (unclassified).

[4] *Policy Conference on Economic Growth and Investment in Education, II, Targets for Education in Europe in 1970*, by Ingvar Svennilson with Friedrich Edding and Lionel Elvin.

Table C.—Expenditures for education, including capital outlay, by level of instruction, and by type of control: United States (48 States and D.C.), 1957–58

[In thousands of dollars]

Level of instruction, by type of school	Total	Publicly controlled	Privately controlled
1	2	3	4
All levels (elementary, secondary, higher) [1]	**21,119,565**	**16,748,129**	**4,371,436**
Current expenditures (including interest)	16,916,836	13,299,954	3,616,882
Capital outlay or plant expansion	4,202,729	3,448,175	754,553
Elementary and secondary schools [2]	**15,648,053**	**13,569,163**	[3] **2,078,890**
Current expenditures (including interest)	12,358,323	10,716,416	[3] 1,641,907
Capital outlay	3,289,730	2,852,747	[3] 436,983
Kindergarten through grade 8 [4]	**10,803,619**	**9,241,957**	**1,561,662**
Grades 9–12 and postgraduate [4]	**4,844,434**	**4,327,206**	**517,228**
Miscellaneous elementary and secondary schools			
Federal schools for Indians	55,886	55,886	----------
Federal schools on Federal installations	9,043	9,043	----------
Higher education (including subcollegiate departments) [5]	**5,406,583**	**3,114,038**	**2,292,546**
Current expenditures	4,509,666	2,534,690	1,974,975
Educational and general	3,604,414	2,077,565	1,526,849
Auxiliary enterprises	775,316	411,786	363,530
Student aid expenditures	129,935	45,339	84,595
Expenditures from plant funds [6]	896,918	579,348	317,570

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[1] Excludes expenditures for residential schools for exceptional children and for schools of nursing not affiliated with colleges and universities.

[2] Excludes expenditures for Federal schools for Indians, Federal schools on Federal installations, and residential schools for exceptional children. Expenditures for Federal schools are shown separately below.

[3] Estimated on basis of expenditure per pupil in public elementary and secondary schools.

[4] Distribution between grade-groups (kindergarten–grade 8 and grades 9–12 and postgraduate) estimated on basis of average teacher's salary and pupil-teacher ratio at the elementary and secondary levels. Expenditure per pupil in grades 9-12 and postgraduate was calculated as 1.529 times expenditure per pupil in kindergarten–grade 8.

[5] Excludes schools of nursing not affiliated with colleges and universities.

[6] Excludes $134,327,000 expended directly from current funds ($87,091,000 by publicly controlled and $47,236,000 by privately controlled institutions).

Note.—Detail will not necessarily add to totals because of rounding.

Sources: U.S. Department of Health, Education, and Welfare, Office of Education, *Biennial Survey of Education in the United States, 1956–58*, chapter 2, Statistics of State School Systems, 1957–58; and chapter 4, section II, Statistics of Higher Education: Receipts, Expenditures, and Property, 1957–58; *Administration of Public Laws 874 and 815*, June 30 1958; U.S. Department of the Interior, Bureau of Indian Affairs; and unpublished data available in the Office of Education.

Table D.—Gross national product related to total expenditures[1] for education: United States, 1929–30 to 1960–61

Calendar year	Gross national product (in millions)	School year	Expenditures for education	
			Total (in millions)	As a percent of gross national product
1929	$104, 436	1929–30	$3, 234	3. 10
1931	76, 271	1931–32	2, 966	3. 89
1933	55, 964	1933–34	2, 295	4. 10
1935	72, 502	1935–36	2, 651	3. 65
1937	90, 780	1937–38	3, 014	3. 32
1939	91, 095	1939–40	3, 200	3. 51
1941	125, 822	1941–42	3, 204	2. 55
1943	192, 513	1943–44	3, 522	1. 83
1945	213, 558	1945–46	4, 168	1. 95
1947	234, 289	1947–48	6, 574	2. 81
1949	258, 054	1949–50	8, 796	3. 41
1951	328, 975	1951–52	11, 312	3. 44
1953	365, 385	1953–54	13, 950	3. 82
1955	397, 469	1955–56	16, 812	4. 23
1957	442, 769	1957–58	21, 120	4. 77
1959	482, 783	1959–60	[2] 24, 617	5. 10
1960	[2] 504, 448	1960–61	[2] 27, 300	5. 41

[1] Includes expenditures of public and nonpublic schools at all levels of education (elementary, secondary and higher education).

[2] Estimate for 50 States and the District of Columbia.

Note: Unless otherwise indicated, data are for 48 States and the District of Columbia.

Sources: U.S. Department of Health, Education, and Welfare, Office of Education, *Biennial Survey of Education in the United States;* U.S. Department of Commerce, Office of Business Economics, *Survey of Current Business*, July 1958 and July 1961.

Table E.—Expenditures of higher educational institutions for educational and general purposes and for organized research: Aggregate United States, selected years, 1930–60

Year	Expenditures in millions			Organized research as percent of—	
	Total [1]	Educational and general	Organized research	Total	Educational and general
1930	$508. 5	$379. 1	$18. 1	3. 5	4. 8
1940	678. 6	525. 5	28. 1	4. 1	5. 4
1950	2, 260. 0	1, 717. 9	227. 3	10. 1	13. 2
1952	2, 486. 2	1, 933. 6	320. 4	12. 9	16. 4
1954	2, 902. 5	2, 288. 4	374. 9	12. 9	16. 4
1956	3, 524. 7	2, 788. 8	506. 1	14. 3	18. 1
1958	4, 543. 6	3, 634. 1	733. 9	16. 1	20. 2
1960 (estimate)	[2] 5, 700. 0	[2] 4, 500. 0	[3] 1, 100. 0	19. 3	24. 4
1961 (estimate)			[3] 1, 400. 0		
Ratio 1960/1930	11:1	12:1	60:1	5:1	5:1

[1] In addition to educational and general expenditures, includes student aid expenditures, other current expenditures, and expenditures for auxiliary enterprises.

[2] Author's estimate, taking into account the increase in expenditures for organized research and the growth curve for total expenditures between 1952 and 1958.

[3] Author's estimate, computed from data on Federal support of research in universities (National Science Foundation, *Federal Funds for Science X*)—1960 actual $782.8 million, 1961 estimate $964.3 million—by assuming that the Federal share continues to approximate 70 percent of the total.

Source: Data for 1930–58 for the aggregate United States from U.S. Department of Health, Education, and Welfare Office of Education, *Biennial Survey of Education*. Data for 1960, author's estimates.

Excerpts follow from the description by an official of the Russian S.F.S.R. State Planning Committee of aspects of the system's operation,[5] stressing "projected requirements for specialists in branches of new technology . . .":

> The plan of training and the plan of distribution of specialists are an organic part of the national economic plan . . . The first task of the plan of training is to guarantee a continuous process of training of specialists with higher and secondary specialized education in line with the requirements of the national economy and culture . . .
>
> In line with the decisions of the plenum of the Communist Party of the Soviet Union's Central Committee, the U.S.S.R. *Gosplan*, *Gosplans* of the union republics, [regional] Councils of National Economy together with ministries and offices having higher and secondary specialized educational institutions, have done substantial work to make more precise the projected requirements for specialists in branches of new technology and have implemented measures for broadening their training. [This statement was in response to the Communist Party Central Committee's criticism of defects in planning the training of specialists with higher education.]
>
> The second task of the plan of training specialists is guaranteeing an elevation of the quality of training . . . The third task is broadening the training of specialists without interrupting production [broadening higher and secondary specialized part-time education] in every way possible.
>
> In working out the annual and long-range plans it is necessary to make provision for such output of specialists that for every specialist with higher qualifications in the national economy there are two to four and more specialists with secondary qualifications (depending on the specialty of individual branches of the national economy) . . .
>
> The indices of plans for the training and distribution of specialists are unified and obligatory for all councils of national economy, ministries, and offices. The basic indices of these plans are confirmed in the national economic plans, in connection with which U.S.S.R. *Gosplan* annually transmits tabular forms to the union-republic Councils of Ministers, ministries and offices, and instructions for their completion.
>
> The plans of training and distribution of specialists are as directed, that is, every plan gives the quota, for councils of national economy, ministries, and offices having educational institutions, of students admitted and of specialists graduated in accordance with the planning period. In the plan of distribution of specialists, it is specifically indicated to which councils of national economy, ministry and offices, graduates are directed . . .

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[5] L. A. Komarov, *Planirovanie podgotovki i raspredeleniia spetsialistov v S.S.R.* (Planning of Training and Distribution of Specialists in the U.S.S.R.), Moscow, 1961. Komarov is Deputy Director of the Division of Education, Culture, and Planning of Training and Distribution of Young Specialists, *Gosplan* R.S.F.S.R.

Since 1954, U.S.S.R. *Gosplan* has worked out projections of annual plans for training specialists by groups of specialties for every ministry, office, and union republic. The annual plans for training specialists by individual specialties for all ministries, offices, and union republics, have been confirmed by the U.S.S.R. Ministry of Higher Education with approval of U.S.S.R. *Gosplan*, and interested ministries, offices, and union-republic Councils of Ministers.

Since 1955, plans for training of specialists in educational institutions of republic ministries and offices have been confirmed by union-republic Councils of Ministers.

At the present time, a further extension of the rights of the union republics in training of specialists has occurred. The U.S.S.R. Council of Ministers confirms the general size of admissions and graduations from higher and secondary specialized educational institutions.

Plans of admission and graduation from higher educational institutions of union republics are confirmed by the republic Councils of Ministers with U.S.S.R. *Gosplan* approval for groups of specialties. For individual specialties, admission and graduation plans for these [republic] educational institutions are confirmed by republic ministries and offices with union republic *Gosplan* approval.

Samples of the tabular forms prepared by the State Planning Committee and sent annually to the union-republic Councils of Ministers along with instructions for completion, follow:[6]

Form 1. Student admissions to and graduations from higher educational institutions (number of persons)

Indexes	Admissions			Graduations		
	1961	1961	1962	1961	1961	1962
	Plan	Expectation of fulfillment	Draft plan	Plan	Expectation of fulfillment	Draft plan
Daytime higher educational institutions						
Total						
Enumeration of specialties within each group of specialties						
Evening higher educational institutions						
Total						
Enumeration of specialties within each group of specialties						
Correspondence higher educational institutions						
Total						
Enumeration of specialties within each group of specialties						

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[6] *Ibid.*, p. 76–81. The forms for tabulating the numbers of specialists with secondary specialized education are similar to those for specialists with higher education.

Form 2. Model scheme of computing additional requirements for specialists

Specialty number	Titles of groups of specialties and individual specialties	Number of positions subject to filling by specialists	General availability of specialists	Including number of specialists engaged in local work	Availability of practical workers	Additional Requirements for Specialists			
						Total	including		
							Assured increase of positions	Vacancies requiring compensation	Practical workers for partial replacement
	Total including:								
	3. Power engineering								
0301	Electric power stations, networks, and systems								
	5. Machine building and instrument making								
0510	Hoisting and transportation machinery and equipment								

Form 3. Computation of fulfillment of requirements for specialists

Specialty number	Titles of groups of specialties and individual specialties	Graduations from evening educational institutions	Graduations from correspondence educational institutions	Advance of technicians, graduating from higher educational institutions without interrupting production, to positions as engineers	Transfer of technicians and engineers engaged in local work	Graduations from daytime educational institutions	Other new specialists
	Total including:						
	3. Power engineering						
0301	Electric power stations, networks, and systems						
	5. Machine building and instrument making						
0510	Hoisting transportation machinery and equipment						

Form 4. Plan of assignment of specialists graduating from higher educational institutions (to councils of national economy, ministries, union-republic Councils of Ministers)

Graduating specialists	Total number of specialists assigned	Specialists from higher educational institutions			
		R.S.F.S.R. Ministry of Higher and Secondary Specialized Education	R.S.F.S.R. Ministry of Agriculture	R.S.F.S.R. Ministry of Culture	Ukrainian S.S.R. Council of Ministers
Total including:					
(a) Those from educational institutions subordinate to [higher education authority] offices					
(b) Those from educational institutions of other ministries and offices					
Listed by specialty					

To some extent the current Soviet higher education system represents a trend toward decentralization in administration, as distinct from overall planning and control. The immediate higher education authority until 1959 for all higher schools throughout the country was the U.S.S.R. Ministry of Higher Education in Moscow (with the exception of the Ukrainian S.S.R. which had its own Ministry of Higher Education).

Since 1959, new higher bodies have been established in each republic, having dual subordination to the republic Council of Ministers and the U.S.S.R. Ministry of Higher and Secondary Specialized Education. The current government authority over higher education in each of the 15 Soviet republics is shown below:

Republic higher education authority

Republic	*Authority*
Russian S.F.S.R	Ministry of Higher and Secondary Specialized Education.
Armenian S.S.R	Committee of Higher and Secondary Specialized Education.
Azerbaidzhan S.S.R	Committee of Higher and Secondary Specialized Education.
Belorussian S.S.R	Ministry of Higher Secondary Specialized, and Vocational Education.
Estonian S.S.R	State Committee of Higher and Secondary Specialized Education.
Georgian S.S.R	State Committee of Higher and Secondary Specialized Education.
Kazakh S.S.R	Ministry of Higher and Secondary Specialized Education.
Kirgiz S.S.R	Ministry of Education.
Latvian S.S.R	State Committee of Higher and Secondary Specialized Education.
Lithuanian S.S.R	State Committee of Higher and Secondary Specialized Education.
Moldavian S.S.R	Committee of Higher and Secondary Specialized Education.
Tadzhik S.S.R	State Committee of Higher, Secondary Specialized, and Vocational Technical Education.
Turkmen S.S.R	State Committee of Higher and Secondary Specialized Education.
Ukrainian S.S.R	Ministry of Higher and Secondary Specialized Education.
Uzbek S.S.R	Ministry of Higher and Secondary Specialized Education.

Immediate supervision of Soviet higher schools is not limited to the established higher education ministries and committees in each republic. In fact, less than half of the higher schools (333) are supervised by higher education agencies. The majority (376) are under the authority of the government and other bodies most concerned with the fields of specialized training: Nearly all the medical institutes are under the republic ministries of health; most of the institutes training specialists in agriculture, under the republic ministries of agriculture; transportation and communication institutes, under various related government agencies; and higher pedagogical schools, generally under the republic ministries of education rather than ministries of higher education.

This pattern is in conformity with the constantly reiterated Soviet concept that education must be "linked with life." It tends to develop higher schools that are responsive to short-range state economic and cultural pressures, and to various shifts in the needs defined by operating economic agencies of the State.

Besides the designated higher education authority for each republic, there are more than a dozen other agencies directly supervising Soviet higher education institutions, as follows:

Table F.—Number of higher educational institutions, by type of institution and supervisory authority: U.S.S.R., 1961

Type of institution	No. of H.E.I.	Supervisory authority	No. of H.E.I.
Total	**709**		**709**
Universities	39	Republic higher education authority	39
Industrial and technical institutions:			
Chemico-technology	10	Republic higher education authority	10
Engineering-construction, geodesy and automobile-highway.	26	Republic higher education authority	26
Food and fish industry	12	Republic higher education authority	12
Geology, mining, petroleum, fuel and metallurgy	23	Republic higher education authority	23
Hydrometeorology institutes	2	Republic higher education authority	2
Light industry	8	Republic higher education authority	8
Machine building, ship building, avation, polygraphic, and film-engineering.	29	Republic higher education authority	28
		RSFSR Ministry of Culture	1
Polytechnical, industrial, and factory-technical	44	Republic higher education authority	43
		Council of national economy (sovnarkhoz) of economic administrative region.	1
Power, electrotechnical, radiotechnical and physico-technical.	8	Republic higher education authority	8
Transportation and communication	29	U.S.S.R. Ministry of Railways	12
		U.S.S.R. Ministry of Communications	7
		U.S.S.R. Ministry of Maritime Fleet	4
		RSFSR Ministry of River Fleet	3
		Main Administration of Civil Air Fleet, Attached to U.S.S.R. Council of Ministers.	2
		Republic higher education authority	1
Other higher institutions:			
Agriculture and forestry	106	Republic Ministry of Agriculture	80
		Republic higher education authority	26
Economics	25	Republic higher education authority	17
		Republic Ministry of Trade	4
		U.S.S.R. Central Union of Consumers' Cooperatives	4
Fine arts	47	Republic higher education authority	25
		Republic Ministry of Culture	22
Law	4	Republic higher education authority	4
Medicine	80	Republic higher education authority	2
		Republic Ministry of Health	78
Pedagogy, library historical-achives and literature.	201	Republic Ministry of Education	140
		Republic higher education authority	56
		Republic Ministry of Culture	4
		U.S.S.R. Union of Soviet Writers	1
Physical culture	16	Republic union of sports societies and organizations.	12
		Republic higher education authority	3
		U.S.S.R. union of sports societies and organizations.	1

As indicated in the titles of the central ministry (U.S.S.R. Ministry of Higher and Specialized Secondary Education) and of the republic ministries and committees for both higher education and secondary specialized education, the higher schools, for purposes of the Soviet economy, are connected in planning and control to the 3,328 [7] secondary specialized schools, which primarily produce middle-level technicians. The apparent rationale for this linkage is that both types of schools produce the pool of Soviet specialist manpower, for which coordinated planning and overall administration is neccessary.

Direct supervision of the secondary specialized schools links them even more closely to the Soviet economy than the higher schools. Only 3 of the 87 secondary specialized schools in Moscow are supervised by the Ministry of Higher and Secondary Specialized Education.

Supervision of the great majority (84) of these schools is about equally divided between the city's Council of National Economy, medical organizations, industrial and cultural ministries, and the Moscow City Executive Committee (the local government agency). The ministries and committees of higher and secondary specialized education appear to have a more immediate role in operating secondary specialized schools in the non-Russian republics, although the government economic-agency tie-in is also substantial in those areas.

The types of secondary specialized schools in Moscow and their supervision are as follows:

Table G.—Number of secondary specialized educational institutions (tekhnikums, schools), by type of school and supervisory authority: Moscow, 1961

Types of schools	Number of schools	Supervisory authority	Number of schools
Industry, topography, construction	40	Moscow City Sovnarkhoz	22
		Moscow City Executive Committee	11
		RSFSR Ministry of Higher and Specialized Secondary Education.	3
		RSFSR Ministry of Grain Products	1
		RSFSR Ministry of Trade	1
		U.S.S.R. Ministry of Geology and Fuel	1
		State Committee for Local Industry and Industrial Arts, RSFSR Council of Ministers.	1
Transportation and communication	5	U.S.S.R. Ministry of Railways	2
		RSFSR Ministry of River Fleet	1
		RSFSR Ministry of Automobile Transport and Highways	1
		U.S.S.R. Ministry of Communications	1
Economics and medicine	26	RSFSR Ministry of Health	20
		Moscow City Executive Committee	1
		RSFSR Central Statistical Administration	1
		RSFSR Ministry of Trade	1
		RSFSR Ministry of Culture	1
		U.S.S.R. Academy of Medical Sciences	1
		Central Clinical Hospital	1
Pedagogy	3	Moscow City Executive Committee	3
Culture and arts	13	RSFSR Ministry of Culture	7
		U.S.S.R. Bolshoi Theater	1
		State Committee for Local Industry and Industrial Arts, RSFSR Council of Ministers.	1
		Moscow City Executive Committee	4
Total	**87**	**Total**	**87**

---

[7] The number of secondary specialized schools in the U.S.S.R. given by official Soviet sources for the 1960–61 school year, when total student enrollment in the schools was 2,060,000. Statistics for the 1961–62 school year are 3,416 secondary specialized schools, with enrollment of 2,370,000.

Production of Specialists

The broad purpose of Soviet higher education is to provide specialists, well indoctrinated in Communist tenets, to meet the objectives defined by the State's leaders in the economic, scientific, social, and cultural fields.

The vast majority of higher education students pursue narrowly specialized curricula which provide the theoretical base for their fields of specialization, but "broadened" only by the required courses in Communist ideology and a foreign language.

Soviet higher education has no equivalent to liberal arts education. Even the 40 Soviet universities, which enroll only about 10 to 15 percent of the total student body in higher schools, are concerned with the production of specialists, trained intensively in a single field of the natural sciences, social sciences, or humanities.

About 85 to 90 percent of the Soviet higher school students are not in the universities, but in the 699 specialized institutes which produce skilled engineering and other professionals in narrow aspects of industry, agriculture, and economics, and in medicine, pedagogy and other fields.

In general, the universities provide the theorists and scholars, while the institutes provide the professionals in applied fields for the Soviet economy and society.

Student admission quotas in higher education are made, students are enrolled, and graduates are assigned work according to numerical specialty classification, as shown in the latest Soviet numerical listing, published in 1961.[8]

Official classification of higher education specialties

Classification number of specialty	*Titles*
	Specialty Group 1. Geology and Exploration for Mineral Resources (9 specialties):
0101	Geology and exploration for mineral resources.
0102	Geological surveying and prospecting for mineral resources (specialty offered in universities).
0103	Geology and exploration for petroleum and gas deposits.
0104	Exploration and training for exploitation of peat deposits.
0105	Geophysical methods for prospecting and exploration for mineral resources.
0106	Geochemistry (specialty offered in universities).
0107	Hydrogeology and engineering geology.
0108	Technics for exploration of mineral deposits.
0109	Geology.

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[8] Source: L. A. Komarov, *op. cit.*, p. 82-90. The table is entitled "Compendium of Specialties for Planning, Training, and Distribution of Specialists with Higher Education." The volume also includes classification and listing of specialists in secondary specialized education.

Classification number of specialty	*Titles*
	Specialty Group 2. Exploitation of Mineral Resources (8 specialties):
0201	Mine surveying.
0202	Exploitation of mineral resources.
0203	Exploitation of peat deposits.
0204	Enrichment of mineral resources.
0205	Exploitation of petroleum and gas deposits.
0206	Construction of mining enterprises.
0207	Planning and exploitation of gas and petroleum pipelines, gas storage tanks, and petroleum bases.
0208	Equipping of gas and petroleum pipelines, gas storage tanks, and petroleum bases.
	Specialty Group 3. Power (9 specialties):
0301	Electric power stations and systems.
0302	Electric power networks.
0303	Electrification of industrial enterprises and installations.
0304	Mining electromechanics.
0305	Thermal power installations of electric power stations.
0307	Hydropower installations.
0308	Industrial thermal power.
0309	Thermal physics.
0310	Planning and exploitation of atomic energy installations.
	Specialty Group 4. Metallurgy (8 specialties):
0401	Metallurgy of ferrous metals.
0402	Metallurgy of nonferrous metals.
0403	Metallurgical furnaces.
0404	Casting of ferrous and nonferrous metals.
0405	Physico-chemical research of metallurgical processes.
0406	Physics of metals.
0407	Metallography, equipment and technology of thermal processing of metals.
0408	Pressure processing of metals.
	Specialty Group 5. Machine Building and Instrument Making (38 specialties):
0501	Technology of machine building, metal-cutting tools and instruments.
0502	Machinery and technology of foundry production.
0503	Machinery and technology of pressure processing of metals.
0504	Equipment and technology of welding processes.
0505	Mechanical equipment of ferrous and nonferrous metallurgical plants.
0506	Mining machinery.
0507	Peat mining machinery.
0508	Machinery and equipment of petroleum and gas technology.
0509	Agricultural machinery.
0510	Hoisting and transportation machinery and equipment.
0511	Construction and road machinery and equipment.
0512	Railroad car construction and economy.
0513	Automobiles and tractors.
0514	Shipbuilding and ship repair.
0515	Polygraphic machinery repair.
0516	Machinery and apparatus of chemical production.

Classification number of specialty	*Titles*
0517	Machinery and apparatus of food production.
0518	Machinery and apparatus of light and textile industries production.
0519	Machinery and mechanisms of timber industry and forestry.
0520	Boiler construction.
0521	Turbine construction.
0522	Machinery and equipment of communications enterprises.
0523	Internal combustion engines.
0524	Ship machinery and mechanisms.
0525	Ship power installations.
0526	Locomotive construction.
0527	Dynamics and durability of machinery.
0528	Hydraulic turbines and other hydraulic machinery.
0529	Refrigeration and compressor machinery and installations.
0530	Optical instruments.
0531	Instruments of precision mechanics.
0532	Mechanical equipment of aircraft.
0533	Cinematographic equipment.
0535	Aircraft construction.
0537	Aircraft propulsion.
0553	Hydroaerodynamics.
0556	Optics and spectroscopy.
0557	Optico-physical instruments.
	Specialty Group 6. Electrical Machine Building and Electrical Instrument Making (22 specialties):
0601	Electrical machinery and apparatus.
0602	Electrical transport.
0603	Electroinsulation and cable technics.
0604	Dielectrics and semiconductors.
0605	Electrovacuum machinery.
0606	Automatics and telemechanics.
0607	Automation of production processes.
0608	Mathematics and computing instruments and devices.
0609	Gyroscopic instruments and devices.
0610	Electroacoustics and ultrasonic technics.
0611	Electronic instruments.
0612	Industrial electronics.
0613	Electrothermal installations.
0614	Lighting engineering and principles.
0615	Sound engineering.
0617	Aircraft instrument manufacturing.
0619	Electrical equipment of ships.
0621	Technical exploitation of aircraft instruments and electrical equipment.
0623	Electromechanical communications equipment.
0625	Instruments and installations of radiometering and telemetering devices.
0626	Electromeasuring technique.
0627	Electronic medicine equipment.
	Specialty Group 7. Radio Engineering and Communications (6 specialties):

Classification number of specialty	Titles
0701	Radio engineering.
0702	Telegraph and telephone communications.
0703	Radio communications and broadcasting.
0704	Radio physics and electronics.
0705	Design and technology of radio equipment manufacturing.
0706	Technical exploitation of aircraft radio equipment.
	Specialty Group 8. Chemical Technology (18 specialties):
0801	Technology of petroleum and gas.
0802	Chemical technology of fuel.
0803	Technology of inorganic compounds.
0804	Technology of rare and diffused elements.
0805	Technology of electrochemical production.
0806	Technology of silicates.
0807	Technology of basic and organic synthesis and synthetic rubber.
0808	Technology of dyes and intermediate products.
0809	Technology of medical and aromatic compounds.
0810	Technology of plastics.
0811	Technology of varnishes, paints, and nonmetallic coatings.
0812	Technology of rubber.
0813	Technology of cinematographic-photographic materials.
0819	Technology of electrovacuum materials.
0822	Chemical kinetics and combustion.
0823	Technology of separation and use of isotopes.
0824	Chemical technology.
0825	Solar chemistry.
	Specialty Group 9. Timber Engineering and Technology of Wood Processing Cellulose, and Paper (4 specialties):
0901	Timber engineering.
0902	Mechanical technology of wood processing.
0903	Chemical technology of wood processing.
0904	Technology of cellulose-paper production.
	Specialty Group 10. Technology of Food Products (15 specialties):
1001	Storage and technology of grain processing.
1002	Technology of bread baking, macaroni, and products.
1003	Technology of sugar products.
1004	Technology of fermentation processes.
1005	Technology of wine making.
1006	Technology of vegetable fats.
1007	Technology of canning.
1008	Technology of subtropical cultivation.
1009	Technology of meat and dairy products.
1010	Technology of fish products.
1011	Technology and organization of public catering.
1012	Industrial fisheries.
1013	Ichthyology and fish breeding.
1014	Technology of food products.
1015	Technology of vitamin production.
	Specialty Group 11. Technology of Consumer Goods (10 specialties):
1101	Primary processing of fiber materials.
1102	Mechanical technology of fiber materials.
1103	Chemical technology of fiber materials.

Classification number of specialty	Titles
1104	Technology of synthetic fibers.
1105	Technology of garment manufacturing.
1106	Technology of leather and fur.
1107	Technology of synthetic leather.
1108	Technology of leather goods.
1109	Technology of printing and publishing.
1110	Technology of garment and footwear manufacturing.
	Specialty Group 12. Construction (15 specialties):
1201	Architecture.
1202	Industrial and civil construction.
1203	Hydrotechnical construction of river installations and hydroelectric power stations.
1204	Hydrotechnical construction of maritime waterways and ports.
1206	Urban construction and municipal services.
1207	Production of concrete and reinforced concrete units and structures for prefabricated construction.
1208	Heat and gas supply and ventilation.
1209	Water supply and sewage systems.
1210	Railroad construction.
1211	Automobile roads.
1212	Bridges and tunnels.
1213	Airport construction.
1214	Hydrotechnical and hydromelioration (irrigation) construction.
1215	Sanitation engineering.
1216	Construction of roads, bridges, and airports.
	Specialty Group 13. Geodesy and Cartography (4 specialties):
1301	Engineering geodesy.
1302	Astro-geodesy.
1303	Aerial photography geodesy.
1304	Cartography,
	Specialty Group 14. Hydrology and Meteorology (5 specialties):
1401	Hydrology of dry land.
1402	Oceanography.
1403	Hydrography.
1404	Meteorology.
1405	Agricultural meteorology.
	Specialty Group 15. Agriculture and Forestry (12 specialties):
1501	Soil science and agro-chemistry.
1502	Agronomy.
1503	Fruit and vegetable growing and viniculture.
1504	Plant protection.
1505	Sericulture.
1506	Zootechnics.
1507	Veterinary science.
1508	Land conservation.
1509	Mechanization of agricultural production processes.
1510	Electrification of agricultural production processes.
1511	Hydromelioration.
1512	Forestry.
	Specialty Group 16. Transportation (exploitation) (10 specialties):
1601	Locomotives and locomotive transport.

Classification number of specialty	*Titles*
1602	Electrification of railroad transport.
1603	Automatics, telemechanics, and communications in railroad transport.
1604	Exploitation of railroads.
1605	Municipal electrical transport.
1606	Maritime navigation.
1607	Navigation on internal waterways.
1608	Exploitation of water transport.
1609	Exploitation of automotive transport.
1610	Exploitation of airplanes and engines.
	Specialty Group 17. Economics (35 specialties):
1701	Planning of national economy.
1702	Economics of industry.
1703	Economics and planning of material-technical supply.
1704	Economics of labor.
1705	Economics and organization of mining industry.
1706	Economics and organization of petroleum and gas industries.
1707	Economics and organization of power engineering.
1708	Economics and organization of metallurgical industry.
1709	Economics and organization of machine building industry.
1710	Economics and organization of shipbuilding industry.
1711	Economics and organization of chemical industry.
1712	Economics and organization of polygraphic industry.
1713	Economics of cinematography.
1714	Economics and organization of consumer goods industry.
1715	Economics and organization of agriculture.
1716	Economics of agriculture (economist programs requiring 4 years of study).
1718	Economics and organization of food products industry.
1719	Economics and organization of forestry and timber industry.
1720	Economics and organization of wood processing and cellulose-paper industry.
1721	Economics and organization of construction.
1722	Economics and organization of municipal services.
1723	Economics and organization of railroad transport.
1724	Economics and organization of water transport.
1725	Economics and organization of automobile transport.
1726	Economics and organization of air transport.
1727	Economics of national economy.
1728	Economics and organization of communications.
1729	Economics of trade.
1731	International economic relations.
1732	Merchandising of industrial goods.
1733	Merchandising of food products.
1734	Finance and credit.
1735	Statistics.
1736	Accounting.
1738	Mechanization of accounting and computing.
	Specialty Group 18. Law (2 specialties):
1801	Jurisprudence.
1802	International relations.

Classification number of specialty	*Titles*
	Specialty Group 19. Public Health, and Physical Culture (6 specialties):
1901	Medicine.
1902	Pediatrics.
1903	Sanitation.
1904	Stomatology.
1905	Pharmacy.
1906	Physical culture and sports.
	Specialty Group 20. Specialties in Universities (excluding specialties given in other groups) (28 specialties):
2001	Russian language and literature.
2002	Native language and literature of peoples of U.S.S.R.
2003	Slavic languages and literature.
2004	Romano-Germanic languages and literature.
2005	Eastern languages and literature.
2006	Classical philology.
2007	Area studies on foreign countries of the East.
2008	History.
2009	Historico-archival science.
2010	Political economy.
2011	Philosophy.
2012	Psychology.
2013	Mathematics.
2014	Mechanics.
2015	Astronomy.
2016	Physics.
2017	Geophysics.
2018	Chemistry.
2019	Biology.
2020	Botany.
2021	Zoology.
2022	Plant physiology.
2023	Human and animal physiology.
2024	Anthropology.
2027	Journalism.
2028	Literary work.
2029	History of the arts.
2030	Geography.
	Specialty Group 21. Specialties in Pedagogical and Library Institutes (21 specialties):
2101	Russian language and literature.
2102	Native language and literature.
2103	Foreign languages.
2104	Mathematics.
2105	Physics.
2106	Natural science and chemistry.
2107	Geography.
2108	History.
2109	Drafting and drawing.
2110	Pedagogy and psychology.
2111	Defectology.

Classification number of specialty	*Titles*	
2112	Cultural-educational work.	
2113	Library science and bibliography.	
2114	Physical education.	
2115	Native language and literature.	At 2-year teachers' institutes.
2116	Physics and mathematics.	
2117	History.	
2118	Natural science and geography.	
2119	Music and singing.	
2120	General technical disciplines and labor.	
2121	Pedagogy and methods of national education.	
	Specialty Group 22. Arts (28 specialties):	
2201	Piano (organ).	
2202	Orchestral instruments.	
2203	Folk instruments.	
2204	Singing.	
2205	Opera-symphonic conducting.	
2206	Choral conducting.	
2207	Composition.	
2208	Musicology.	
2209	Dramatic theater and cinema acting.	
2210	Musical comedy acting.	
2211	Drama production.	
2212	Musical theater production.	
2213	Ballet production.	
2214	Cinema production.	
2215	Cinema operation.	
2216	Theatrical techniques and stage-setting.	
2217	Theater science.	
2218	Cinema science.	
2219	Painting.	
2220	Graphics.	
2221	Sculpture.	
2222	Artistic metal working.	
2223	Artistic wood working.	
2224	Artistic glass and plastics working.	
2226	Artistic ceramics.	
2227	Artistic fashioning of fabrics and fabric products.	
2228	History and theory of graphic art.	
2229	Interior decoration of buildings and production of decoration materials.	

In all, there are 303 Soviet higher education specialties, of which 217, or 71 percent, are in industrial (including construction, transport, and communications), agricultural, and economic fields. Less than 10 percent are classed as university specialties, but this figure apparently is somewhat higher than indicated because of the reporting methods used.

This weighting of the higher education system toward producing specialists to serve specifically the requirements of the economy is reflected in other statistical series. Of the 739 Soviet higher educational institutions, 349, or 47 percent, are specialized institutes for industry, agriculture, and economics. Student enrollments in these fields number 1,387,300 (1960–61 school year), or 57 percent of the total higher education enrollment.

The number of students training in engineering specialties (1,080,535 in 1960–61) is 49 percent of the total number of students enrolled in Soviet higher schools. In 1960, engineering graduates numbered 120,132 or 35 percent of the total of 342,050 graduates, and engineers already comprised 3.51 percent of the total number of specialists working in the Soviet economy.

The current Soviet 7-year plan, "Control Figures for the Development of the National Economy," confirmed at the 21st Communist Party Congress, calls for almost doubling (1.9 times) the number of engineering graduates during the 1959–65 period, as compared with the preceding 7-year period, and the graduation of 1.5 times more agriculture specialists. Higher education graduations, as the plan provides, will increase 1.4 times, producing 2,300,000[9] specialists as compared with 1,700,000, 1952–58. The profile of the Soviet higher education, therefore, will continue to be that of a system weighted toward training specialists for industry and agriculture.

The greatest increase of engineers up through 1965, according to the 7-year plan control figures, will be in chemical technology, automation, computing techniques, radio electronics, and other new technological fields.[10]

Part-Time Higher Education

Slightly more than half of the Soviet students in higher education are studying in part-time programs, or, to use Soviet phraseology, "studying without interruption from [of] production." In the 1960–61 school year, 1,240,000 of the 2,395,500 higher education students were in evening (shift) divisions of higher schools or studying by correspondence-extension. (The system of study described here as "correspondence-extension" is called literally "by correspondence," *zaochno* in Soviet sources and translations.) The remaining students in higher education (1,155,000) were in full daytime programs at regular higher educational institutions, or "studying with interruption from [of] production." In the 1961–62 school year, the number of part-time students had risen to 1,436,000.[11]

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[9] The total number of higher education graduations for the first 3 years of the 7-[illegible] plan is 1,005,100. The official Soviet figures are 338,000 graduations in 1959, 342,100 in 1960, and 325,000 in 1961.

[10] *Dokumenty i materialy po perestroike shkoly* (Documents and Materials for Reorganization of the Schools), published by R.S.F.S.R. Ministry of Education, Moscow, 1960, p. 138.

[11] *Public Education in the Soviet Union, op. cit.*

Over 40 percent of Soviet higher students are in correspondence-extension programs, which have been the major source of increased enrollments in Soviet higher education for the past decade. Regular daytime enrollments have remained almost stationary since the 1955–56 school year. Soviet plans are to accelerate part-time education as the principal means of higher education.

The "Programme of the Communist Party of the Soviet Union, Adopted by the 22d Congress of the C.P.S.U. October 31, 1961," published in Moscow in 1961 by the Foreign Languages Publishing House, states (quoting the complete section of the program entitled "Higher and Secondary Special Education"):

> In step with scientific and technical progress, higher and secondary special education, which must train highly skilled specialists with a broad theoretical and political background, will be expanded.
>
> Shorter working hours and a considerable improvement in the standard of living of the entire population will provide everyone with an opportunity to receive a higher or secondary special education if he so desires. The number of higher and secondary specialized schools, evening and correspondence schools in particular, as well as higher schools at factories, agricultural institutes (on large state farms), studios, conservatories, etc., must be increased in all areas of the country with the support of factories and trade unions and other social organizations. The plan is to considerably increase every year the number of students at higher and secondary specialized schools; special education will be afforded to tens of millions of people.

At the 22d Party Congress, Premier Khrushchev stated that by 1980 it was proposed to raise the number of students in higher schools to 8 million, increasing enrollments more than 3 times; evening and correspondence education would be particularly widespread.

Correspondence Institutes

Correspondence-extension training is given through special correspondence institutes, which are officially accredited higher educational institutions, and by correspondence-extension divisions of regular higher educational institutions.

Twelve of the 17 Soviet correspondence institutes are in Moscow, with branches distributed throughout the Russian S.F.S.R. Eleven of the institutes are subordinate to republic higher education authorities, the others to government ministries concerned with related specialties. Fourteen of the 17 institutes are in the industrial, agricultural, and economic fields, and the remaining 3 are devoted to pedagogy and law.

A laboratory class in Northwest Correspondence Polytechnical Institute, Leningrad.

Institutes, location, and responsible authorities

Institute	City	Supervision
All-Union Correspondence Polytechnical Institute.	Moscow	RSFSR Ministry of Higher and Secondary Specialized Education.
Northwestern Correspondence Polytechnical Institute.	Leningrad	RSFSR Ministry of Higher and Secondary Specialized Education.
Ukrainian Correspondence Polytechnical Institute.	Kharkov	Ukrainian SSR Ministry of Higher and Secondary Specialized Education.
All-Union Correspondence Power Institute.	Moscow	RSFSR Ministry of Higher and Secondary Specialized Education.
All-Union Correspondence Machine-Building Institute.	Moscow	RSFSR Ministry of Higher and Secondary Specialized Education.
All-Union Correspondence Food Industry Institute.	Moscow	RSFSR Ministry of Higher and Secondary Specialized Education.
All-Union Correspondence Institute for Textile and Light Industry.	Moscow	RSFSR Ministry of Higher and Secondary Specialized Education.
All-Union Correspondence Institute for Engineering-Construction.	Moscow	RSFSR Ministry of Higher and Secondary Specialized Education.

Institute	City	Supervision
All-Union Correspondence Institute for Railroad Transport Engineers.	Moscow	U.S.S.R. Ministry of Railways.
All-Union Correspondence Institute for Electrotechnical Communications.	Moscow	U.S.S.R. Ministry of Communications.
All-Union Agricultural Institute for Correspondence Education.	Balashikha (Moscow Oblast).	RSFSR Ministry of Agriculture.
All-Union Correspondence Institute for Timber Engineering.	Leningrad	RSFSR Ministry of Higher and Secondary Specialized Education.
All-Union Correspondence Institute for Finance and Economics.	Moscow	RSFSR Ministry of Higher and Secondary Specialized Education.
Correspondence Institute for Soviet Trade.	Moscow	RSFSR Ministry of Trade.
All-Union Juridical Correspondence Institute.	Moscow	RSFSR Ministry of Higher and Secondary Specialized Education.
Armenian Correspondence Pedagogical Institute.	Erevan	Committee for Higher and Secondary Specialized Education. Armenian SSR Council of Ministers.
Moscow Correspondence Pedagogical Institute.	Moscow	RSFSR Ministry of Education.

Distribution of student enrollments in correspondence-extension education by field is shown in admission and graduation data,[12] which also suggest a substantial dropout rate:

Table H.—Number of correspondence students admitted and graduated from higher educational institutions, by field: U.S.S.R., 1950 and 1955

Branch group of higher education institutions	Number of correspondence students admitted		Number of correspondence students graduated	
	1950	1955	1950	1955
Total	**111,617**	**175,019**	**29,023**	**62,034**
Agriculture	4,693	18,387	303	1,086
Art and cinematography	274	492	8	129
Economics and law	12,755	16,921	3,825	6,534
Education	76,526	84,551	24,488	50,146
Health, physical culture, and sports	1,462	1,985	124	539
Industry and construction	13,854	44,019	1,103	3,251
Transportation and communication	2,052	9,463	172	365

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[12] E. V. Chutkerashvili, *Razvitie vysshego obrazovania v SSSR* (Development of Higher Education in the USSR), Moscow, 1961, p. 146, 148.

Those enrolled in correspondence-extension and evening courses are granted leave from work, with pay, for consultation on their specialties, preparation for state examinations, and diploma work. The relevant regulations of the Council of Ministers, effective since the 1959–60 school year, for students in correspondence and evening higher educational institutions (H.E.I.'s) are: [13]

1. For first- and second-year students, 20 calendar days' leave in evening H.E.I.'s (faculties, divisions), and 30 calendar days' leave in correspondence H.E.I.'s.
2. For third and later years, 30 calendar days' leave in evening H.E.I.'s, and 40 in correspondence H.E.I.'s.
3. 30 calendar days' leave for preparation for State examination.
4. 4 months' leave for preparation and defense of diploma project.
5. For 10 months' prior to beginning of completion of diploma project, one free work day a week at half pay.

Correspondence-extension and evening students may receive an additional month's leave without pay in their senior year for orientation in production work related to their chosen specialty, and for preparation of materials for their diploma project.

The trend in Soviet higher education is toward a gradual merger of part-time and full-time education with related on-the-job training. The current educational reform "connecting school with life" has affected higher education by incorporating substantial on-the-job training into the regular school programs, thereby lengthening the period of studies.

Plant-Higher Schools for Technical Education

The line between full-time and part-time education is being obscured further by the development of a new type of Soviet higher school, called the plant-higher technical educational institution (*Zavod VTUZ*). These higher technical schools, the first of which were established in 1960, are located within and are a part of major Soviet industrial plants. Although not designated as part-time institutions, they are organized "on the basis of evening divisions" of regular higher schools.[14] The courses of study, combining regular studies with factory work and specialized training, extend from 6 months to a year beyond those of regular higher schools.

The plant-higher schools for technical education are equipped from factory facilities and maintained by the factory; and "*the plant itself, its shop, and all its production processes will be the capital base for full-fledged training and educational and scientific and technical work.*"[15]

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[13] *Ibid.*, p. 152.

[14] *Izvestiia*, January 29, 1960.

[15] Minister of Higher and Specialized Secondary Education, V. P. Elyutin, in interview by a *Pravda* correspondent, *Pravda*, June 23, 1960.

Specialists in the plants form at least part of the teaching staff, and professors and instructors perform research in line with each plant's industrial production plan.

As of 1961, there were five plant-higher technical educational institutions, functioning in the Moscow Automobile Plant Named for I. A. Likhachev; the Leningrad Metallurgical Plant Named for I. V. Stalin; the Rostov Plant for Agricultural Machine Building; the Penza Plant; and in the Dneprodzerzhinsk Metallurgical Plant.

The first four institutions are administered by the RSFSR Ministry of Higher and Secondary Specialized Education. The Dneprodzerzhinsk *Zavod-VTUZ* is administered by the Ukrainian higher education authority, and is the only one identified as having several faculties (major administrative subdivisions), for metallurgy, technology, and general technical correspondence training.

Status of Part-Time Education

In surveying Soviet professional education literature and the Soviet press, it is evident that part-time education, and particularly correspondence-extension training, is of a caliber below that of regular daytime higher education. Soviet educators and the Communist Party press [16] express concern over the lack of textbooks and methods literature for correspondence students, the concentration of correspondence and evening higher schools in Moscow (a particular difficulty for correspondence students), the lack of material and technical facilities (laboratories, libraries) and equipment for correspondence and evening students. Also of concern are the substantial dropout of students each year, the weakness of graduating students in the theory of their specialties, and the fact that experienced teachers avoid correspondence work. One Soviet publication states that in the libraries of educational institutions, correspondence students receive books only after the students in the full-time departments have been provided with them.

These and other problems of the evening and correspondence school system are enumerated in Soviet sources, but with a view toward improvement of existing conditions. It is probable that innovations such as the plant-higher educational institutions are an attempt to overcome defects in this increasingly dominant form of Soviet higher education.

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[16] Numerous citations are available. The Soviet sources used here are: *Pravda*. September 19, 1960 (lead editorial); *Kommunist Estonii*, May 1960; *Uchitelskaia gazeta*, May 20, 1961 and July 14, 1961; *Vestnik vysshei shkoly*, May 1961 and June 1962.

Analysis of Soviet Statistics

The 20 tables of statistics which follow have been selected and translated from *Vysshee obrazovanie v SSSR* (Higher Education in the U.S.S.R.), a statistical compilation prepared and published in 1961 by the Central Statistical Administration, attached to the U.S.S.R. Council of Ministers, Moscow. Statistics are for the beginning of the school year, unless otherwise indicated.

Additional statistics, for the 1961–62 school year, have been added to a number of the tables. The source for these statistics is the 1962 publication of the Central Statistical Administration, *Narodnoe khoziaistvo SSSR v 1961 godu* (National Economy of the U.S.S.R in 1961).

In general, Soviet statistics are considered reasonably accurate within limits of the reporting system and with the reservations cited below (a–d). While it is useful to report Soviet statistics as an indication of the order of magnitude and emphases of the higher education system, *direct comparison of Soviet statistics with those of other countries can lead to serious error.* Various responsible Western sources refer to typical problems in the use of Soviet statistics:[1]

a. Details concerning tabulation procedures and internal organization of materials are sparse or lacking.

b. Significant gaps appear in many statistical series, presumably because of the State Secrets Act. Enrollments in higher Communist Party schools and military schools are not listed. The breakdown of enrollments and graduations in science fields is not reported, the generalized category, "specialties in universities," obscuring these data. On occasion, for categories reported in annual series, years and categories are selected which demonstrate the most substantial increases.

c. Data are reported without definitions, or with unreported changing definitions, or are given only in percentages. Data on occasion are misinterpreted by non-Soviet analysts; totals of the "enlightenment" category, which includes noneducational as well as educational subcategories, have been misread as education totals.

d. There are aggregations of distinct categories which tend to conceal unfavorable trends or to exaggerate successes. For example, the current Soviet statistical practice is to compare the total of Soviet enrollments in all forms of higher education (full-time, part-time, and correspondence) with the total of United States full-time and part-time enrollments, *minus* students enrolled in the first 2 years of U.S. higher education.

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[1] Feshback, Murray, *The Soviet Statistical System: Labor Force Recordkeeping and Reporting*, International Population Statistics Reports Series P–90, No. 12, Bureau of the Census, U.S. Department of Commerce, U.S. Government Printing Office, Washington, D.C., 1960, p. 19–20. DeWitt, Nicholas, *Education and Professional Employment in the U.S.S.R.*, National Science Foundation, U.S. Government Printing Office, Washington, D.C., 1961, p. 549–553.

APPENDIX A

Soviet Higher Educational Statistics

Table 22.—Number of specialists with higher education working in the national economy, by specialty: U.S.S.R., selected years, 1928–60

	Thousands of specialists								
	1928	Jan. 1, 1941	Jan. 1, 1946	July 1, 1950	Apr. 1, 1954	July 1, 1955	Dec. 1, 1957	Dec. 1, 1959	Dec. 1, 1960
	(Figures in parentheses are percent of total)								
Total specialists with higher education working in the National economy	**233.0** **(100)**	**909.0** **(100)**	**896.9** **(100)**	**1,442.8** **(100)**	**2,008.5** **(100)**	**2,184.0** **(100)**	**2,805.5** **(100)**	**3,235.7** **(100)**	**3,545.2** **(100)**
Engineers	47.0 (20.2)	289.9 (31.9)	277.5 (30.9)	392.4 (27.2)	530.2 (26.4)	585.9 (26.8)	816.1 (29.1)	986.6 (30.5)	1,115.5 (31.5)
Agronomists, zootechnicians, veterinarians, and foresters	28.0 (12.0)	69.6 (7.7)	59.4 (6.6)	109.5 (7.6)	134.5 (6.7)	158.7 (7.3)	193.1 (6.9)	222.4 (6.9)	241.8 (6.8)
Economists, economist statisticians	13.0 (5.6)	57.0 (6.2)	48.3 (5.4)	72.8 (5.1)	96.0 (4.8)	105.2 (4.8)	145.2 (5.2)	177.6 (5.5)	197.7 (5.6)
Commodities experts		2.3 (.3)	1.8 (.2)	4.7 (.3)	7.8 (.4)	8.6 (.4)	12.3 (.4)	16.3 (.5)	19.3 (.5)
Lawyers	13.0 (5.6)	20.9 (2.3)	15.6 (1.7)	25.1 (1.7)	40.7 (2.0)	47.1 (2.2)	57.8 (2.1)	65.5 (2.0)	69.8 (2.0)
Doctors (excluding dentists)	63.2 (27.0)	141.8 (15.6)	126.2 (14.1)	232.4 (16.1)	280.4 (14.0)	299.0 (13.7)	346.0 (12.3)	378.6 (11.7)	400.6 (11.3)
Teachers, and university graduate librarians and cultural-educational workers	59.0 (25.3)	300.4 (33.1)	333.3 (37.2)	556.7 (38.6)	867.8 (43.2)	906.4 (40.5)	1,144.9 (40.8)	1,278.9 (39.5)	1,378.1 (38.9)

Table 23.—Number and percent of women specialists with higher education working in national economy, by specialty: U.S.S.R., 1941, 1954, and 1960

Specialties	Thousands of women			Women as percent of total specialists	
	Jan. 1, 1941	Apr. 1, 1954	Dec. 1, 1960	Jan. 1, 1941	Dec. 1, 1960
Total women specialists with higher education working in national economy	**312.3**	**1,098.3**	**1,864.6**	**34**	**53**
Engineers	43.2	151.5	320.1	15	29
Agronomists, zootechnicians, veterinarians, and foresters	17.6	54.9	94.5	25	39
Economists, economist-statisticians, commodities experts	18.1	56.3	112.7	31	57
Lawyers	3.1	13.0	22.3	15	32
Doctors (excluding dentists)	85.4	214.3	302.0	60	75
Teachers, university graduate librarians, and cultural-educational workers	144.5	581.0	901.3	49	65

Table 24.—Number of higher educational institutions and enrollment: U.S.S.R., 1914–15 and 1922–23 to 1961–62

School year	Number of educational institutions	Thousands of students
1914–15 (current boundaries).	105	127. 4
1922–23	248	216. 7
1923–24	187	208. 3
1924–25	169	169. 5
1925–26	145	167. 0
1926–27	148	168. 0
1927–28	148	168. 5
1928–29	152	176. 6
1929–30	190	204. 2
1930–31	579	287. 9
1931–32	701	405. 9
1932–33	832	504. 4
1933–34	714	458. 3
1934–35	688	527. 3
1935–36	718	563. 5
1936–37	700	542. 0
1937–38	683	547. 2
1938–39	708	602. 9
1939–40	750	619. 9
1940–41	817	811. 7
1945–46	789	730. 2
1946–47	805	871. 7
1947–48	807	963. 6
1948–49	823	1, 032. 1
1949–50	864	1, 132. 1
1950–51	880	1, 247. 4
1951–52	887	1, 356. 1
1952–53	827	1, 441. 5
1953–54	818	1, 562. 0
1954–55	798	1, 730. 5
1955–56	765	1, 867. 0
1956–57	767	2, 001. 0
1957–58	763	2, 099. 1
1958–59	766	2, 178. 9
1959–60	753	2, 267. 0
1960–61	739	2, 395. 5
1961–62	731	2, 640. 0
1960–61 as a percent (or multiple) of—		
1914–15	(7 times)	(19 times)
1927–28	(5 times)	(14 times)
1932–33	89	(5 times)
1940–41	90	295
1950–51	84	192
1955–56	97	128
1958–59	96	110

Table 25.—Enrollment in higher education, by type of instruction: U.S.S.R., 1940–62

School year	Thousands of students			
	Total	In day divisions	In evening divisions	In correspondence
1940–41	**811. 7**	558. 1	26. 9	226. 7
1945–46	**730. 2**	525. 2	14. 0	191. 0
1946–47	**871. 7**	636. 2	13. 3	222. 2
1947–48	**963. 6**	690. 4	15. 2	258. 0
1948–49	**1, 032. 1**	716. 0	18. 4	297. 7
1949–50	**1, 132. 1**	755. 9	22. 3	353. 9
1950–51	**1, 247. 4**	817. 9	27. 2	402. 3
1951–52	**1, 356. 1**	886. 1	32. 1	437. 9
1952–53	**1, 441. 5**	933. 6	37. 9	470. 0
1953–54	**1, 562. 0**	994. 4	48. 3	519. 3
1954–55	**1, 730. 5**	1, 084. 1	62. 4	584. 0
1955–56	**1, 867. 0**	1, 147. 0	80. 9	639. 1
1956–57	**2, 001. 0**	1, 177. 1	100. 8	723. 1
1957–58	**2, 099. 1**	1, 193. 1	127. 2	778. 8
1958–59	**2, 178. 9**	1, 179. 6	153. 3	846. 0
1959–60	**2, 267. 0**	1, 145. 8	195. 8	925. 4
1960–61	**2, 395. 5**	1, 155. 5	244. 9	995. 1
1961–62	**2, 640. 4**	1, 204. 0	307. 0	1, 129. 0
1960–61 as a percent (or multiple) of—				
1940–41	295	207	(9 times)	439
1945–46	328	220	(17 times)	(5 times)
1950–51	192	141	(9 times)	247
1955–56	128	101	303	156
1958–59	110	98	160	118

Table 26.—Number off higher educational institutions and enrollment, by branch groups of institutions: U.S.S.R., selected years, 1914–61

Branch group of institutions	1914–15	1940–41	1945–46	1950–51	1955–56	1959–60	1960–61
	Number of institutions						
All institutions, total	**105**	**817**	**789**	**880**	**765**	**753**	**739**
Industry and construction	18	136	148	147	165	164	169
Transport and communications		28	28	35	38	38	37
Agriculture	14	91	92	94	99	100	96
Economics and law	15	47	44	47	39	58	51
Health, physical culture, and sport	6	78	80	89	94	98	98
Education	52	407	349	417	285	248	241
Art and cinematography		30	48	51	45	47	47
	ENROLLMENT IN THOUSANDS						
All institutions, total	**127.4**	**811.7**	**730.2**	**1,247.4**	**1,867.0**	**2,267.0**	**2,395.5**
Industry and construction	24.9	168.4	158.0	272.8	550.6	768.1	872.6
Transport and communications		36.2	29.3	47.9	99.0	145.1	146.7
Agriculture	4.6	52.1	49.8	104.1	195.9	261.4	246.4
Economics and law	11.4	36.3	44.5	89.2	106.7	153.9	161.9
Health, physical culture, and sport	5.0	109.8	115.6	111.5	158.8	184.4	188.9
Education	81.5	398.6	321.9	607.0	741.6	737.2	759.6
Art and cinematography		10.3	11.1	14.9	14.4	16.9	19.4

Table 27.—Enrollment in higher education, by groups of specialties: U.S.S.R., selected years, 1950–62

Groups of specialties	Thousands of students				1960–61 as percent of		1961–62 (rounded)
	1950–51	1955–56	1959–60	1960–61	**1950–51**	**1955–56**	
All specialties, total	**1,247,382**	**1,866,994**	**2,266,979**	**2,395,545**	**192**	**128**	**2,639,900**
Geology and prospecting for mineral resources	16,251	32,259	21,820	21,276	**131**	**66**	22,100
Mining of mineral resources	20,860	36,471	30,924	30,248	**145**	**83**	32,100
Power engineering	23,840	52,493	68,663	74,608	**313**	**142**	78,400
Metallurgy	14,708	24,713	29,323	31,500	**214**	**127**	33,400
Machine building and instrument making	86,332	172,534	270,116	302,684	**351**	**175**	344,300
Electro-machine building and electro-instrument making	14,156	36,250	69,988	91,330	**(6 times)**	**252**	121,600
Radiotechnics and communication	15,630	39,795	65,025	78,228	**(5 times)**	**197**	90,000
Chemical technology	23,906	37,610	47,280	56,194	**235**	**149**	60,900
Timber engineering and technology of wood, cellulose, and paper	8,659	20,499	22,277	22,863	**264**	**112**	24,300
Technology of food products	10,049	18,165	27,195	31,349	**312**	**173**	36,200
Technology of consumer goods	9,464	20,144	26,645	28,821	**305**	**143**	32,000
Construction	37,092	93,202	135,116	147,024	**396**	**158**	164,400
Geodesy and cartography	2,793	3,507	5,354	5,870	**210**	**167**	6,500
Hydrology and meteorology	2,848	4,123	4,583	5,158	**181**	**125**	5,500
Agriculture and forestry	107,682	191,786	254,168	236,008	**219**	**123**	253,300
Transport (exploitation)	23,741	36,628	58,319	65,617	**276**	**179**	73,500
Economics	72,591	131,461	198,413	217,674	**300**	**166**	248,900
Law	45,383	38,803	38,820	40,301	**89**	**104**	43,400
Health and physical culture	113,300	159,711	186,249	189,161	**167**	**118**	197,000
Specialties in universities	87,452	126,668	176,962	186,953	**214**	**148**	200,100
Specialties in pedagogical and library institutes	496,283	576,278	512,515	512,803	**103**	**89**	552,000
Art	14,362	13,894	17,224	19,875	**138**	**143**	23,000

Table 28.—Enrollment in engineering, by engineering specialty: U.S.S.R., selected years, 1950–61

Groups of specialties	1950–51	1955–56	1959–60	1960–61	1960–61 as percent of—	
					1950–51	1955–56
Total, all engineering specialties	**346,424**	**700,983**	**977,795**	**1,080,535**	**312**	**154**
Geology and prospecting for mineral resources	16,251	32,259	21,820	21,276	131	66
Mining of mineral resources	20,860	36,471	30,924	30,248	145	83
Power engineering	23,840	52,493	68,663	74,608	313	142
Metallurgy	14,708	24,713	29,323	31,500	214	127
Machine building and instrument making	86,332	172,534	270,116	302,684	351	175
Electro-machine building and electro-instrument making	14,156	36,250	69,988	91,330	(6 times)	252
Radiotechnics and communications	15,630	39,795	65,025	78,228	(5 times)	197
Chemical technology	23,906	37,610	47,280	56,194	235	149
Timber engineering and technology of wood, cellulose, and paper	8,659	26,499	22,277	22,863	264	112
Technology of food products	10,049	18,165	27,195	31,349	312	173
Technology of consumer goods	9.464	20.144	26,645	28,821	305	143
Construction	37,092	93,202	135,116	147,024	396	158
Geodesy and cartography	2,793	3.507	5,354	5,870	210	167
Hydrology and meteorology	2,848	4,123	4,583	5,158	181	125
Specialties in agriculture and forestry:						
Organization of land exploitation	2,754	5,043	4,950	4.209	153	83
Agricultural mechanization	12,756	36,540	60,991	56,945	446	156
Agricultural electrification	3,388	6,120	7,830	6,704	198	110
Irrigation	5,117	10,281	7,671	7,009	137	68
Forestry	12,080	14,606	13,725	12,898	107	88
Transport (exploitation)	23,741	36,628	58,319	65,617	276	179

Table 29.—Women students as percent of total enrollment in higher education, by main areas: U.S.S.R., selected years, 1927–61

Main area	1927–28	1940–41	1945–46	1950–51	1955–56	1960–61
Number of women students (in thousands)	(47)	(471)	(562)	(661)	(971)	(1.042)
Women as percent of total enrollment	28	58	77	53	52	43
Women as percent of total students in:						
Industry, construction, transport, and communications	13	40	60	30	35	30
Agriculture	17	48	79	39	39	27
Economics and law	21	64	77	57	67	49
Health, physical culture, and sport	52	74	90	65	69	56
Education, art, and cinematography	49	66	84	71	71	63

Table 30.—Number and percent of women students in higher education, by type of instruction: U.S.S.R., 1960–61

Type of instruction	Thousands of students		Women as percent of total students
	Both sexes	Women	
Total	**2,395,545**	**1,041,645**	**43**
Day divisions	1,155.554	520,758	45
Evening division	244,894	95,780	39
Correspondence instruction	995,097	425,107	43

Table 31.—Admissions to higher educational institutions by type of instruction: U.S.S.R., 1940–41 and 1945–46 to 1961–62

Year	Thousands of students			
	Total	Day division	Evening division	Correspondence instruction
1940–41	**263.4**	154.9	6.6	101.9
1945–46	**285.7**	171.6	4.9	109.2
1946–47	**327.2**	201.6	4.4	121.2
1947–48	**281.1**	189.5	4.7	86.9
1948–49	**291.8**	187.2	6.4	98.2
1949–50	**324.3**	203.3	6.9	114.1
1950–51	**349.1**	228.4	9.1	111.6
1951–52	**374.4**	245.2	10.3	118.9
1952–53	**387.3**	249.0	11.8	126.5
1953–54	**430.8**	265.1	16.6	149.1
1954–55	**469.0**	276.2	22.9	169.9
1955–56	**461.4**	257.2	28.4	175.8
1956–57	**458.7**	231.2	32.6	194.9
1957–58	**438.3**	219.7	34.7	183.9
1958–59	**455.9**	215.5	42.2	198.2
1959–60	**511.7**	227.1	63.5	221.1
1960–61	**593.1**	257.9	77.0	258.2
1961–62	**669.9**	279.4	93.1	294.4
1960–61 as a percent (or multiple) of—				
1940–41	225	166	(12 times)	253
1950–51	170	113	(8 times)	231
1955–56	129	110	271	147
1959–60	116	114	121	117

Table 32.—Number and percent of admissions to higher educational institutions by branch group of institutions: U.S.S.R., selected years, 1940 to 1961

Branch group	1940–41	1945–46	1950–51	1955–56	1959–60	1960–61	1961–62
	Admissions in thousands						
Total admissions	**263.4**	**285.7**	**349.1**	**461.4**	**511.7**	**593.1**	**666.9**
Industry and construction	45.4	52.5	74.0	144.8	185.6	225.1	245.8
Transport and communications	8.3	9.5	12.0	29.8	32.2	34.1	37.6
Agriculture	11.9	17.9	28.5	51.1	57.3	62.7	71.9
Economics and law	13.6	20.3	25.5	28.5	40.1	43.9	50.7
Health, physical culture, and sport	23.0	26.7	23.7	32.3	33.2	36.8	38.9
Education	159.0	155.0	182.6	172.0	159.0	185.2	216.0
Art and cinematography	2.2	3.8	2.8	2.9	4.3	5.3	6.0
	Percent of total						
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**
Industry and construction	17.2	18.4	21.2	31.4	36.3	38.0	36.9
Transport and communications	3.2	3.3	3.4	6.4	6.3	5.7	5.6
Agriculture	4.5	6.3	8.2	11.1	11.2	10.6	10.8
Economy and law	5.2	7.1	7.3	6.2	7.8	7.4	7.6
Health, physical culture, and sport	8.7	9.3	6.8	7.0	6.5	6.2	5.8
Education	60.4	54.3	52.3	37.3	31.1	31.2	32.4
Art and cinematography	.8	1.3	.8	.6	.8	.9	.9

Table 33.—Number and percent of graduations of specialists from higher educational institutions, by branch group: U.S.S.R., selected years, 1940–61

Branch group	1940	1945	1950	1955	1959	1960	1961
	Graduations in thousands						
Total graduations	**126.1**	**54.6**	**176.9**	**245.8**	**338.0**	**342.1**	**325.5**
Industry and construction	24.2	8.5	30.0	56.4	92.3	95.0	97.1
Transport and communications	5.9	1.6	6.1	9.5	16.3	16.1	17.0
Agriculture	10.3	2.9	12.7	24.1	34.5	34.7	31.8
Economics and law	5.7	2.4	11.4	15.6	25.0	24.7	24.7
Health, physical culture, and sport	17.4	6.6	20.0	16.9	29.5	30.0	30.6
Education	61.6	32.0	94.1	120.8	138.0	139.1	121.8
Art and cinematography	1.0	.6	2.6	2.5	2.4	2.5	2.5
	Percent of total						
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**
Industry and construction	19.2	15.5	17.0	23.0	27.3	27.8	29.9
Transport and communications	4.7	3.1	3.4	3.8	4.8	4.7	5.3
Agriculture	8.2	5.3	7.2	9.8	10.2	10.1	9.5
Economy and law	4.5	4.4	6.4	6.4	7.5	7.2	7.6
Health, physical culture, and sport	13.8	12.0	11.3	6.8	8.7	8.8	9.4
Education	48.9	58.6	53.2	49.2	40.8	40.7	37.5
Art and cinematography	.7	1.1	1.5	1.0	.7	.7	.8

Table 34.—Graduations of specialists from higher educational institutions by groups of specialties: U.S.S.R., selected years, 1950–61

Group of specialties	Number of specialties				1960 as percent of—		1961 (rounded)
	1950	1955	1959	1960	1950	1955	
Total	**176,869**	**245,846**	**337,969**	**342,050**	**193**	**139**	**325,500**
Geology and prospecting for mineral resources	1,721	3,976	5,351	3,898	226	98	3,500
Mining of mineral resources	1,353	5,290	6,230	5,246	388	99	4,600
Power engineering	2,380	4,957	8,441	8,425	354	170	8,400
Metallurgy	1,416	2,656	4,005	3,884	274	146	3,900
Machine building and instrument making	9,101	15,736	28,349	30,408	334	193	32,400
Electro-machine building and electro-instrument making	1,433	2,981	6,833	8,138	(6 times)	273	8,500
Radiotechnics and communications	1,427	2,950	6,074	6,299	441	214	7,200
Chemical technology	2,586	4,954	5,404	5,702	220	115	5,600
Timber engineering and technology of wood, cellulose, and paper	727	1,885	3,497	3,724	(5 times)	198	3,100
Technology of food products	2,295	1,878	3,094	3,396	148	181	3,600
Technology of consumer goods	1,240	1,669	3,068	3,109	251	186	3,300
Construction	4,873	9,440	17,335	17,760	364	188	17,900
Geodesy and cartography	294	540	466	612	208	113	500
Hydrology and meteorology	379	628	657	668	176	106	700
Agriculture and forestry	12,859	24,563	33,908	34,391	267	140	31,500
Transport (exploitation)	3,059	4,236	6,275	6,620	216	156	6,900
Economics	10,103	16,138	30,718	30,415	301	188	31,700
Law	5,648	8,126	6,263	6,016	107	74	5,600
Health and physical culture	20,747	16,943	29,803	29,953	144	177	30,800
Specialties in universities	12,323	15,560	30,200	29,876	242	192	28,400
Specialties in pedagogical and library institutes	78,529	98,249	99,656	101,003	129	103	84,800
Art	2,376	2,491	2,342	2,507	106	101	2,600

Table 35.—Graduations of engineers from higher educational institutions, by groups of specialties: U.S.S.R., selected years, 1950–60

Groups of specialties	Number of engineers				1960 as percent of—	
	1950	1955	1959	1960	1950	1955
Total by engineering specialties	**37,434**	**74,569**	**117,543**	**120,132**	**321**	**161**
Geology and prospecting for mineral resources	1,721	3,976	5,351	3,898	226	98
Mining of mineral resources	1,353	5,290	6,230	5,246	388	99
Power engineering	2,380	4,957	8,441	8,425	354	170
Metallurgy	1,416	2,656	4,005	3,884	274	146
Machine building and instrument making	9,101	15,736	28,349	30,408	334	193
Electro-machine building and electro-instrument making	1,433	2,981	6,833	8,138	(6 times)	273
Radio-technics and communications	1,427	2,950	6,074	6,299	441	214
Chemical technology	2,586	4,954	5,404	5,702	220	115
Timber engineering and technology of wood cellulose and paper	727	1,885	3,497	3,724	(5 times)	198
Technology of food products	2,295	1,878	3,094	3,396	148	181
Technology of consumer goods	1,240	1,669	3,068	3,109	251	186
Construction	4,873	9,440	17,335	17,760	364	188
Geodesy and cartography	294	540	466	612	208	113
Hydrology and meteorology	379	628	657	668	176	106
Specialties in group "agriculture and forestry":						
Organization of land exploitation	202	511	893	826	409	162
Agricultural mechanization	1,033	5,068	6,631	6,742	(7 times)	133
Agricultural electrification	152	887	1,044	1,021	(7 times)	115
Irrigation	311	1,576	1,512	1,330	428	84
Forestry	1,452	2,751	2,384	2,324	160	84
Transport (exploitation)	3,059	4,236	6,275	6,620	216	156

Table 36.—Number of universities and enrollments: U.S.S.R., selected years, 1940–60

Years	Number of universities	Number of students
1940–41	29	75,682
1950–51	33	109,737
1955–56	33	166,256
1959–60	40	223,441
1960–61	40	248,962

Table 37.—Number of admissions and graduations in universities: U.S.S.R., selected years, 1940–60

Years	Number of students	
	Admissions of freshmen	Graduations
1940	23,334	7,963
1950	27,127	15,626
1955	36,690	22,866
1959	52,904	39,064
1960	65,590	38,354

Table 38.—Enrollments of *aspirants* (graduate students), by type of instruction: U.S.S.R., selected years, 1940–61

Type of instruction	Number of aspirants				1960 as percent (or multiple of)—			1961
	1940	1950	1955	1960	1940	1950	1955	
Total	**16,863**	**21,905**	**29,362**	**36,754**	**218**	**168**	**125**	**47,560**
In higher educational institutions	13,169	12,487	16,774	20,406	155	163	122	27,066
Training with interruption from production	11,506	11,199	13,212	13,463	177	120	102	17,367
Training without interruption from production	1,663	1,288	3,562	6,943	(4.2 times)	(5.4 times)	195	9,699
In scientific organizations	3,694	9,418	12,588	16,348	(4.4 times)	174	130	20,494
Training with interruption from production	2,919	6,944	8,145	9,515	(3.3 times)	137	117	11,308
Training without interruption from production	775	2,474	4,443	6,833	(8.8 times)	276	154	9,186

Table 39.—Number of admissions to *aspirantura* (graduate study) by type of instruction: U.S.S.R., selected years, 1940–60

Type of instruction	1940	1950	1955	1960	1960 as percent (or multiple) of—		
	Number of admissions				1940	1950	1955
Total	**3,530**	**7,717**	**7,367**	**14,399**	**(4.1 times)**	**187**	**195**
In higher educational institutions	2,768	4,783	4,193	8,271	299	173	197
With interruption from production	2,223	4,253	3,225	5,374	242	126	167
Without interruption from production	545	530	968	2,897	(5.3 times)	(5.5 times)	299
In scientific organizations	762	2,934	3,174	6,128	(8 times)	209	193
With interruption from production	559	2,124	2,159	3,641	(6.5 times)	171	169
Without interruption from production	203	810	1,015	2,487	(12.3 times)	(3.1 times)	245

Table 40.—Number of graduations of *aspirants* (graduate students) by type of instruction: U.S.S.R., selected years, 1940–61

Years	**Total**	Number of graduations by type of instruction			
		In higher educational institutions		In scientific organization	
		With interruption from production	Without interruption from production	With interruption from production	Without interruption from production
1940	**1,978**	1,411	61	454	52
1945	**1,366**	1,092	108	129	37
1946–50	**16,295**	10,087	733	4,767	708
1951–55	**31,475**	18,128	1,371	9,887	2,089
1956	**8,453**	4,805	496	2,408	744
1957	**8,250**	4,288	653	2,523	786
1958	**6,802**	3,119	707	2,053	923
1959	**5,603**	2,585	745	1,504	769
1960	**5,517**	2,407	613	1,718	779
1961	**6,921**	3,145	650	2,262	864

Table 41.—Enrollment of *aspirants* (graduate students) by branches of study: U.S.S.R., 1950, 1960, 1961 (at end of year)

Branch of study	1950		1960		1960 as percent (or multiple) of 1950		1961
	Number of *aspirants*	Number in higher educational institutions	Number of *aspirants*	Number in higher educational institutions	Number of *aspirants*	Number in higher educational institutions	Number of *aspirants*
Total	**21,905**	**12,487**	**36,754**	**20,406**	**168**	**163**	**47,500**
Physico-mathematics	972	618	3,435	2,726	(3.5 times)	(4.4 times)	4,887
Chemistry	1,319	667	2,402	1,296	182	194	3,001
Biology	1,247	611	1,877	732	151	120	2,396
Geology-mineralogy	503	233	1,313	533	261	229	1,659
Technical	5,809	2,854	13,936	6,720	240	235	17,630
Agriculture and veterinary	2,165	835	2,877	1,077	133	129	3,953
History and philosophy	2,607	1,745	1,726	1,184	66	68	2,194
Economics	1,366	1,014	2,776	1,661	203	164	3,504
Philology	1,980	1,457	1,471	1,067	74	73	1,830
Geography	328	190	402	254	123	134	505
Law	748	489	402	280	54	57	497
Pedagogy	862	568	956	691	111	122	1,291
Medicine and pharmacy	1,386	862	2,585	1,846	187	214	3,441
Art	459	290	448	314	98	108	598
Architecture	154	54	148	25	96	46	174

APPENDIX B

U.S. Higher Education Statistics*

Table 42.—Total and first-time opening (fall) degree-credit enrollment,[1] by sex: 1956–61

[Figures rounded to nearest thousand]

Year	Total degree-credit enrollment			First-time degree-credit enrollment [2]		
	Both sexes	Men	Women	Both sexes	Men	Women
	Number					
Fall 1962	4,207,000	2,603,000	1,604,000	1,039,000	602,000	437,000
Fall 1961	3,891,000	2,424,000	1,467,000	1,026,000	596,000	430,000
Fall 1960	3,610,000	2,271,000	1,339,000	930,000	543,000	387,000
Fall 1959	3,402,000	2,174,000	1,228,000	827,000	491,000	336,000
Fall 1956	2,947,000	1,928,000	1,019,000	723,000	446,000	277,000
	Percent changes					
1960 to 1961 (1 year)	+7.8	+6.8	+9.5	+10.4	+9.8	+11.2
1959 to 1961 (2 years)	+14.4	+11.5	+19.4	+24.1	+21.4	+27.9
1956 to 1961 (5 years)	+32.0	+25.7	+44.0	+41.9	+33.6	+55.3

[1] Degree-credit students are those whose programs consist wholly or principally of work normally creditable toward a bachelor's or a higher degree. Resident and extension degree-credit students, full time and part time, are included. Students taking degree-credit work at home by mail, radio, or TV, and all students in branches of U.S. institutions operated in foreign countries are excluded.

[2] A first-time degree-credit student is one who is reported as a degree-credit student but who has not previously been a degree-credit student in any institution of higher education. Students were reported as "first-time" in this survey if the fall of 1961 marked their first enrollment in any institution for programs of the degree-credit type.

Table 43.—Earned degrees conferred, by major area of study, level of degree, and sex: Aggregate United States 1959–60

Major area of study	Bachelor's and first-professional			Second-level (master's, except first-professional)			Doctoral		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
Total	**394,889**	**255,504**	**139,385**	**74,497**	**50,937**	**23,560**	**9,829**	**8,801**	**1,028**
Agriculture	4,898	4,805	93	996	984	12	411	404	7
Architecture	1,801	1,744	57	319	305	14	17	17	0
Biological sciences	15,655	11,693	3,962	2,154	1,668	486	1,205	1,086	119
Business and commerce	51,522	47,629	3,893	4,643	4,476	167	135	133	2
Education	90,179	26,178	64,001	33,512	18,126	15,386	1,590	1,281	309
Engineering	37,808	37,663	145	7,159	7,133	26	786	783	3
English and journalism	22,456	9,001	13,455	3,192	1,670	1,522	405	321	84
Fine and applied arts	13,166	6,141	7,025	2,892	1,763	1,129	292	238	54
Foreign languages and literature	5,498	2,098	3,400	1,134	593	541	229	166	63
Forestry	1,437	1,437	0	207	206	1	29	29	0
Geography	973	858	115	206	177	29	68	64	4
Health professions	24,557	15,170	9,387	1,872	1,075	797	107	99	8
Home economics	4,450	60	4,390	484	11	473	40	6	34
Law	9,314	9,073	241	520	496	24	24	24	0
Library science	1,938	467	1,471	305	70	235	19	17	2
Mathematical subjects	11,437	8,312	3,125	1,765	1,428	337	303	285	18
Merchant marine—deck officer curriculum	202	202	0	0	0	0	0	0	0
Military, naval, or air force science	2,369	2,366	3	0	0	0	0	0	0
Philosophy	3,466	3,052	414	383	335	48	137	112	25
Physical sciences	16,057	14,041	2,016	3,387	3,060	327	1,838	1,776	62
Psychology	8,111	4,785	3,326	1,406	981	425	641	544	97
Religion	9,002	7,563	1,439	1,331	1,124	207	276	265	11
Social sciences	51,802	35,801	16,001	5,998	4,765	1,233	1,237	1,117	120
Trade and industrial training	1,548	1,537	11	0	0	0	0	0	0
Other broad general curriculums and miscellaneous fields	5,243	3,828	1,415	632	491	141	40	34	6

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*Tables 42 and 43 are from *Higher Education* journal of the Office of Education, U.S. Office of Education, U.S. Department of Health, Education, and Welfare, December 1961, p. 12–13. The 1962 data in table 42 has been added from OE Circular No. 697, *Opening (fall) Enrollment in Higher Education, 1962: Institutional data.*

APPENDIX C

Rules for Admission to Higher Educational Institutions, U.S.S.R., 1962

[Regulations concerning admission to higher educational institutions are revised annually and confirmed by the Ministry of Higher and Secondary Specialized Education U.S.S.R. The following regulations for 1962 were translated from the official ministry handbook, *Spravochnik dlia postupaiuschikh v vysshie uchebnye zavedeniia SSSR v 1962 g.*, Moscow, pp. 3–7.]

1. Citizens of the U.S.S.R. of both sexes are admitted to higher educational institutions (H.E.I.) who have met the following qualifications:

- completed secondary education
- up to 35 years old for study with interruption from production [full-time study] or without age limit for study without interruption from production [part-time study] (correspondence-extension and evening study)
- passed the competitive entrance examinations on the basis of competitive selection of those who have shown themselves most worthy in production work
- presented positive character references for entrance into H.E.I. from the [Communist] Party, trade union, *komsomol* and other social organizations. and heads of industrial enterprises and organizations and of collective farms
- graduates of schools of general education and professional-technical [trade] schools with 12-year programs present character references from pedagogical councils and social organizations of those schools
- persons demobilized from the Soviet Army or Navy present character references from their commanding military units

2. For study with interruption from production [regular full-time study]:

a. In universities and other H.E.I.'s for the specialties: journalism, law, literature, philosophy, political economy—only those persons are accepted who have engaged in practical work for not less than 2 years.

b. In pedagogical, medical, stomatological, and pharmaceutical institutes (or faculties), and also for the specialties: international relations, international economic relations—preference is given to persons having practical work experience.

c. Persons sent to study in H.E.I. directly by industrial enterprises, construction enterprises, state farms, collective farms, economic organizations of railroads, organizations and enterprises of state trade, consumer cooperative and cost accounting organizations, and geological survey organizations are accepted after a period of practical work of not less than 2 years.

d. For the specialties (mining, metallurgy, branches of chemical-technology and some others) in which youth under 18 and women are not allowed to engage in production work, a limited number of youth under 18 and women are accepted

e. Persons who have completed secondary specialized educational institutions with interruption from production [full-time] and technical schools, are accepted into H.E.I. after completion of 3 years of practical work following secondary specialized or trade school. The period of practical work is not required of 5 percent of the graduates of secondary specialized educational institutions.

Persons who have completed trade schools and factory schools and who have completed secondary education, are accepted into H.E.I. only after 4 years of practical work following graduation from trade and factory schools.

Persons completing secondary specialized educational institutions with interruption from production [full-time study], technical or trade schools, and factory schools may be accepted in H.E.I. for study with interruption from production, if they upon completion of school served in the military service for not less than 2 years. Persons may be directed to study at H.E.I. (see section 2C) in the course of practical work, not less than 2 years after completion of school.

f. Persons who have completed musical or art schools, and also technicums of physical culture, may be accepted into H.E.I. in a corresponding specialty without 3 year's work upon completion of school, if agreeable to the ministry (or office) in the system of which they are directed to work.

3. For study without interruption from production [part-time study]:

a. In plant-higher technical educational institutions (*zavody-vtuzy*), the foremost workers in industry, the best trained and most capable, having not less than 2 years of practical work experience, including persons who have completed secondary specialized educational institutions with interruption from production, technical or trade schools, factory schools, are accepted not less than 2 years after completion of school.

b. In evening faculties and departments of medical institutes, and also in evening and correspondence-extension faculties and departments of stomatological and pharmaceutical institutes, only those persons are accepted who have had secondary specialized education and work corresponding to their elected specialty in H.E.I., or who have had related work in hospital, pharmaceutical, or other medical organizations for not less than 2 years.

c. In correspondence faculties and departments of veterinary institutes, only those persons are accepted who have completed veterinary technicums and have worked in hospital and other veterinary organizations for not less than 2 years.

4. Preference in enrollment in H.E.I. for study with interruption from production [full-time study] is given to persons having not less than 2 years' practical work experience, and also persons demobilized from the Soviet Army and Navy, who have served not less than 2 years, including time studying in military schools. Study in the Nakhimov and Suvorov schools [Soviet navy and army military academies at the secondary education level] is not included.

Work experience is considered in aggregate, independent of interruptions in work, and also independent of work related to completion of secondary educational institutions, work combined with study in secondary school, or work done prior to entering secondary school.

Practical work experience must be confirmed in writing in [the applicant's] work book or collective farm book.

5. The application for admission to the H.E.I. is forwarded to the H.E.I. rector with the name of the selected faculty and specialty.

To the application are attached:

- character reference for admission to H.E.I.
- document on secondary education (original)
- autobiography
- medical record (Form No. 286)—
- 4 photographs (without hat, size 3x4 cm.)

Upon arrival at the H.E.I., applicants present personally: [internal] passport, military card (for persons in the military service) or draft registration certificate (for persons of military service age).

Soldiers, sailors, sergeants, and master sergeants in final years of service wishing to enter H.E.I. for study with interruption from production [full-time study] present the approving documents of the appropriate military units, upon granting of a brief period of leave for entrance examinations.

Persons admitted to study with interruption from production present a transcript of their labor book, certified by the head of the enterprise or organization, indicating not less than 2 years of practical work experience; members of collective farms present a transcript from the collective farm work book, certified by the manager of the collective farm, stating whether the applicant has fulfilled the minimum number of labor days required by the given collective farm for each of the 2 years of work on the collective farm. Labor experience is calculated from September 1. Persons accepted to H.E.I. are obliged to present their documents at the beginning of the school year, confirming work experience, failing which they will be dismissed from the H.E.I.

Persons sent to study in H.E.I.'s directly by industrial enterprises, construction enterprises, State farms, collective farms, economic organizations of railroads, State trade enterprises, consumer cooperatives, accounting organizations, and geological survey organizations, present in addition an individual order form [a sample of which is given in the *Spravochnik*].

NOTE: Persons completing teachers' institutes or equivalent republic, krai [administrative territory] and oblast' [administrative region] Party schools, together with documents on secondary education present the original diploma (certificate) on completion of the teachers' institute or document on completion of the republic, krai, or oblast' [Communist] Party school.

6. Applications for admission to H.E.I.'s, entrance examinations, and registration for enrollment occur during the following periods:

(1) In all H.E.I.'s (except those of music, art, theater, and cinematography):

a. For study with interruption from production:

- applications for admission—June 20 to July 31
- entrance examinations—August 1 to 20
- registration for enrollment—August 21 to 25

b. For correspondence-extension study in all specialties, except specialties connected with seasonal work and specialties in pedagogy, library science, stomatology, pharmacy, and physical culture and sports:

- applications for admission—April 1 to July 25
- entrance examinations in two periods—May 15 to July 31 and October 1 to 20
- registration for enrollment in two periods—August 1 to 20 and October 21 to 30

In specialties connected with seasonal work (agriculture, river and sea transport, geology, fuel, geodesy, and others):

- application for admission—October 1 to January 15
- entrance examinations—January 16 to March 15
- registration for enrollment—March 16 to 31

In pedagogical and library specialties:

- application for admission—April 1 to May 31
- entrance examinations—June 1 to 20
- registration for enrollment—June 21 to 30

In stomatological, pharmaceutical, and physical culture and sport specialties:

- application for admission—June 1 to July 31
- entrance examinations—August 1 to 20
- registration for enrollment—August 21 to 25

c. For evening study in all specialties, except specialties connected with seasonal work and specialties in pedagogy, library sciences, medicine, stomatology, pharmacy, and physical culture and sports:

- application for admission—June 20 to August 20
- entrance examinations—August 21 to September 20
- registration for enrollment—September 21 to 25

In specialties connected with seasonal work (geology, peat industry, river transport, and other):

- application for admission—October 1 to January 15
- entrance examinations—January 16 to March 15
- registration for enrollment—March 16 to 31

In pedagogical, library, medical, stomatological, pharmaceutical, and physical culture and sports specialties:

- application for admission—June 1 to July 31
- entrance examinations—August 1 to 20
- registration for enrollment—August 21 to 25

(2) In H.E.I.'s of music, art, theater, and cinematography:

a. For all types of study (except correspondence-extension divisions of music and theater H.E.I.'s):

- application for admission—June 1 to July 10
- entrance examinations—July 11 to 25
- registration for enrollment—July 26 to 30

b. For correspondence-extension study and music and theater H.E.I.'s:

- application for admission—August 1 to September 14
- entrance examinations—September 15 to 25
- registration for enrollment—September 26 to 30

7. All persons applying for admission to H.E.I.'s take entrance examinations conducted by the examination commission in the H.E.I. in which they will enter, in Russian language and literature (or the primary language of instruction), foreign language (for study with interruption from production) and in subjects depending upon the given specialty.

Persons applying for admission to correspondence-extension study are allowed to take entrance examinations in the closest H.E.I. to their residence, at the direction of the H.E.I. in which they will enter.

Entrance examinations are conducted in accordance with programs confirmed by the Ministry of Higher and Secondary Specialized Education U.S.S.R. in correspondence with programs of the secondary schools of general education.

Education commissions conduct their work in accordance with regulations confirmed by the Ministry of Higher and Secondary Specialized Education U.S.S.R.

8. Applicants for all specialties take entrance examinations in Russian language and literature (essay), except persons entering H.E.I.'s of union republics in which the language of instruction is not Russian. In the given exception, instead of examinations in Russian language and literature, entrance examinations are in the language of instruction (essay).

Persons completing secondary schools in a language other than the H.E.I. language of instruction take entrance examinations in the language of instruction by exposition or dictation (instead of essay), if they have studied it in the general program for national secondary schools.

Persons who have not studied the H.E.I. language of instruction in secondary school, instead of the entrance examination in the language, are tested only orally. The results of this test, if satisfactory, are not take into consideration in the course of the competitive selection.

Persons entering in a specialty for which Russian or the language of instruction is related to the discipline, take entrance examinations (written and oral) in the language related to the subjects of the given specialty; they take the examination for the second language (Russian or the language of instruction) by exposition or dictation as a general subject. Persons not studying a second language in secondary school take an oral test instead of an entrance examination. The results of this test, if satisfactory, are not taken into consideration in the course of competitive selection.

9. Applicants for study with interruption from production [full-time study] in all specialties take oral entrance examinations in one foreign language—English, German, or French.

Applicants for correspondence-extension and evening study are exempt from entrance examinations in foreign language, except in those specialties for which foreign language is related to the discipline.

Persons having no grades for foreign languages in their secondary school certificates, or having grades for less study than stipulated for secondary school programs, and also persons who studied Spanish or Oriental languages in secondary school, are exempt from the entrance examination in foreign language, except persons entering in the specialties: foreign languages, international relations, and international economic relations.

Persons who have completed secondary specialized educational institutions on the basis of 10 grades of the secondary school, for entrance to H.E.I. take entrance examinations in the fundamentals of a foreign language, according to the rules of admission.

10. Besides examinations in general subjects (see sections 8 and 9), entrance examinations are given in the following subjects, depending upon the specialty selected by the applicant:

a. For the specialties, engineering, engineering-economics, physics-mathematics, astronomy, forestry; general engineering disciplines and labor; defectology and mathematics: entrance examinations in mathematics (written and oral), physics (oral).

b. For the specialties, chemistry, physics-chemistry, chemical technology, chemical technology of wood pulp, technology of cellulose-paper production, technology of food products, technology of consumer goods, merchandizing of industrial and food products, engineering-economics according to branches of industry: entrance examinations in chemisty (oral), mathematics (oral), physics (oral).

c. For the specialty, construction—entrance examination in mathematics (oral), physics (oral), drafting. Applicants for the specialty architecture take in addition an examination in drawing.

d. For the specialties, agriculture (excluding engineering-technical specialties), public health, physical culture and sports, biology, icthyology and fish industry, economics (for agriculture); biology and chemistry; biology and fundamentals of agricultural production; physical education: entrance examinations in physics (oral), chemistry (oral). Applicants for the specialties: physical culture and sports, and physical education take an additional examination according to specialty.

e. For the specialties: political economy, philosophy, history, history-archives, law, psychology, pedagogy; Russian language and literature; defectology, Russian language and literature; native language and literature of peoples of U.S.S.R.; defectology, native language and literature of peoples of U.S.S.R.; library science, cultural-educational work: entrance examinations in Russian language and literature (written and oral) or language of instruction (written and oral), history of

U.S.S.R. (oral). Applicants for the specialty cultural-educational work take a test in music, singing, or dramatics depending on the selected specialization.

f. For the specialties, philology, foreign languages; Russian language and literature, foreign languages; international relations; journalism; literary work: entrance examinations in Russian language and literature (written and oral) or language of instruction (written and oral), a foreign language, taking the entrance examination in history of the U.S.S.R. (oral) as the general subject.

Applicants for the specialty international relations take an additional examination in geography (oral).

g. For the specialties, methods of primary education; defectology, and methods of primary education; entrance examinations in mathematics (oral), Russian language and literature (written and oral) or language of instruction (written and oral), taking the entrance examination in history of the U.S.S.R. (oral) as the general subject.

h. For the specialty, international economic relations: entrance examinations in: Russian language and literature (essay), geography (oral), mathematics (oral), a foreign language, taking the entrance examination in history of the U.S.S.R. as a general subject.

i. For the specialties, economics (except the economic specialties enumerated in subsections "a," "b," "d," and "h" above), and geography: entrance examinations in history of the U.S.S.R. (oral), geography (oral), mathematics (oral). Applicants for the specialty geography and biology take entrance examinations in chemistry (oral), instead of in mathematics (oral).

j. For the fine arts specialties: entrance examinations according to specialty, history of the U.S.S.R. (oral).

k. For the specialties, drawing and drafting, drawing, drafting and labor: entrance examinations in history of the U.S.S.R. (oral), drafting, drawing.

l. Persons entering pedagogical institutes in a specialty which includes singing as a second specialty take a test in singing.

> *Note to section 10.* Persons having the right to enroll in H.E.I. without entrance examinations [in general subjects and other subjects], for the specialties: architecture, drawing and drafting take entrance examinations in drawing and drafting, and for the specialty construction take the examination in drawing. Such applicants for the specialties physical culture and sports, physical education, art, take examinations according to specialty; applicants for the specialty cultural-educational work take a test in music, singing or dramatics; applicants for the specialty foreign languages take the entrance examination in one (appropriate) foreign language.

11. Persons permitted to take entrance examinations in H.E.I.'s are granted 15 calendar days' leave from work without pay by the sending social organizations, enterprises, and organizations (not counting travel time to and from the H.E.I.).

12. Each applicant is given an examination recording form with his photograph affixed.

Attendance at examinations at a strictly specified time is obligatory. Persons who are absent from any examination without valid reason are not permitted to take any further examinations.

In case of illness the applicant must notify the examining commission ot his inability to come to an examination before the beginning of the examination session or present a medical certificate not later than a day after the examination.

13. The results of entrance examinations are evaluated on the basis of the following grades: "excellent," "good," "satisfactory," and "unsatisfactory."

Persons who have received an unsatisfactory grade in one of the oral or written examinations are not permitted to take any further examinations.

The repetition of examinations in case of unsatisfactory grades or for the purpose of improving a grade is not permitted.

14. In case the combined number of applications for study, with interruption from production [full-time study] from the following categories exceeds 80 percent of the planned number of admissions in a given H.E.I., or faculty [administrative subdivision of the H.E.I.], the rector shall reserve 20 percent of the planned number of admissions, on the basis of general competition, for:

- veterans of World War II
- persons sent directly to study in H.E.I. by industrial enterprises, construction enterprises, State farms, collective farms, economic organizations of railroads, organizations and enterprises of State trade, consumer cooperatives, cost accounting organizations, and geological survey organizations
- persons with not less than 2 years' work experience; and
- persons demobilized from the Soviet Army or Navy

15. Enrollment in H.E.I.'s takes place in the following order:

a. For all forms of study:

(1) Without entrance examinations, World War II veterans having a certificate of distinction from secondary school, or awarded a gold or silver medal "for outstanding success and exemplary conduct" upon completion of secondary school, or having a diploma of distinction upon completion of a secondary specialized educational institution.

(2) The following are accepted noncompetitively upon receipt of a positive evaluation:

- World War II veterans
- officers, having completed secondary education, discharged from the Armed Forces U.S.S.R. in connection with the Law on Significant New Reduction of Armed Forces U.S.S.R.

b. For study with interruption from production [full-time study] the following are accepted (after persons enrolled under subsection a, above):

(1) First in order, noncompetitively, upon receipt of a positive evaluation, persons sent directly to study in an H.E.I. by industrial enterprises, construction enterprises, State farms, collective farms, economic organizations of railroads, organizations and enterprises of State trade, consumer cooperatives, cost accounting organizations, and geological surveying organizations.

(2) Then, persons are accepted who have a favorable record of not less than 2 years' work experience and persons demobilized from the Soviet Army and Navy, who have received the highest grades in entrance examinations. Along with this, preference is given to persons the character of whose work corresponds with or is related to the selected specialty in the H.E.I.

c. For study without interruption from production [part-time study], the following are accepted (after persons enrolled under subsection a, above):

(1) Without entrance examinations, in correspondence-extension pedagogical institutes (faculties, divisions)—teachers and instructors who have completed teachers' institutes and are working in elementary, incomplete secondary, and secondary schools, and also in vocational schools, technicums, and other educational institutions with programs of schools of general education, if they apply [for higher education] in their specialty. Those who completed teachers' institutes prior to 1939 are accepted as first-year students; those who finished after 1939 are accepted in special groups with a 3-year program of studies.

(2) Noncompetitively after passing the entrance examinations:

- persons having not less than 2 years' practical work experience in the specialty or a related specialty to the one selected in the H.E.I.

In this category of admissions are persons now engaged in [Communist] Party, *komsomol*, and trade union work, and also persons demobilized from the Soviet Army and Navy, whose study is related to their previous work activity;

- persons completing technical schools with distinction, working in their specialty, and entering the H.E.I. in a related specialty
- persons assigned by organs of public education for correspondence-extension study in the first year of pedagogical institutes, who have completed a 1-year pedagogical course or a pedagogical school

d. For all forms of study—the remaining vacancies for enrollment are filled independently of work experience, taking into account character references for persons seeking admission to the H.E.I., and the highest scores on entrance examinations.

Note to section 15. Other conditions being equal, persons are enrolled first who have been awarded gold or silver medals upon completion of schools [of general education] or diplomas of distinction from secondary specialized educational institutions.

16. An admissions commission is organized by the rector under his personal chairmanship, consisting of: the prorector for instruction and research work; the prorector for correspondence-extension and evening study; the deans of faculties [major administrative subdivisions of H.E.I.]; two professors (docents), the responsible secretary of the admissions commission from the members of the H.E.I. teaching staff; and responsible representatives of *oblast* [administrative region] or city, and in large cities—*raion* [district], party, trade union and *komsomol* organizations of a given H.E.I.

The rector, or upon his instructions, the prorectors, deans of faculties, or the professor (docent) members of the admissions commission, must personally interview every applicant, check all his documents, and supervise the correct processing of documents concerning the admission of students.

The admissions commission must notify the applicant within a week of the receipt of his application about the results of its preliminary screening.

All problems of admissions to examinations in the H.E.I. are decided at meetings of the admissions commission.

17. A selection commission, for applications for admission and selection of applicants in affiliates [branches] and general technical faculties (located territorially outside the H.E.I.) consists of: the director of the affiliate or dean of the general technical faculty; a representative of the H.E.I. (for subordinate affiliates, faculties); representatives of local [Communist Party], trade union, and *komsomol* organizations of city, *raion* (or enterprise).

Affiliates (general technical faculties) of H.E.I.'s give entrance examinations under the supervision of the H.E.I. admissions commission.

Decisions on admission are made by the admissions commission on the basis of consideration by selection commissions of affiliates (general technical faculties).

18. As required, the rector of the H.E.I. schedules medical examinations of applicants for study with interruption from production [full-time study], with the purpose of determining the degree of illness and arranging admissions with specified conditions of study in the H.E.I. and production work for the given specialty.

The results of medical examinations are submitted to the admissions commission for decision on problems of admission to entrance examinations.

19. Decisions on admissions to the H.E.I. are made by the admissions commission.

Enrollments in the H.E.I. are determined by order of the rector on the basis of the decisions of the admissions commission.

The list of persons admitted to the H.E.I. is posted publicly for general information.

20. The documents of persons not accepted by the H.E.I. are returned within a week after their receipt, or after rejection by the admissions commission.

Persons who have taken entrance examinations but are not accepted by a given H.E.I. receive upon their request a certificate listing the grades received in all subjects in which they took examinations.

The certificates are issued on a standard form affixed with the signature of the responsible secretary of the admissions commission.

21. Persons demobilized from the armed forces of the U.S.S.R. who have had a completed higher military education or an incomplete higher military or civilian education (excluding courses interrupted by selection into the army or for other reasons) are enrolled in the H.E.I. as first-year or advanced-year students without entrance examinations provided that they are admitted to the H.E.I. in a specialty corresponding with their previous study.

The right of admission without entrance examinations, to study with interruption from production for the persons in the category above, is retained for 3 years from the date of discharge [from active service] into the reserve.

Enrollment in correspondence-extension and evening study is not dependent on the time of demobilization.

Admission of persons in the category above is on the basis of a diploma certifying completion of a higher military educational institution, or a certificate stating the subjects studied in a higher military or civilian educational institution.

Officers discharged from the armed forces of the U.S.S.R. in conformity with the Law on Significant New Reduction of Armed Forces, U.S.S.R.; and students of higher military educational institutions discharged under the same law into the reserve with the rank of officer, are enrolled in H.E.I.'s upon arrival at their permanent places of residence.

22. Officers of the Soviet army and navy, sergeants, and senior grade enlisted men are accepted into civilian correspondence-extension and evening H.E.I.'s by directives established for them.

23. All decisions connected with admissions to H.E.I.'s are made finally by the admissions commission in conformity with the rules of admission.

24. Persons admitted to H.E.I.'s for study with interruption from production [full-time study] but who fail to enroll without valid reason within 10 days after the beginning of the academic year are dismissed from the student body.

APPENDIX D

Rules for *Aspirantura* (Graduate Study), U.S.S.R., 1962

[New regulations concerning graduate study under higher educational institutions and scientific research institutions were confirmed by Order No. 284, 31 July 1962, of the Minister of Higher and Secondary Specialized Education U.S.S.R. The following was translated from *Biulleten' Ministerstva Vysshego i srednego spetsial'nogo obrazovaniia SSSR*, No. 9, September 1962, Moscow, p. 24–30.]

General Rules

1. Graduate study under higher educational institutions' (H.E.I.'s) and scientific research institutions is a form of training scientific pedagogical and scientific cadres.

2. Graduate study is organized under higher educational institutions and scientific research institutions which have an opportunity to ensure qualified scientific guidance and have their own modern experimental base.

3. Graduate study under higher educational institutions and scientific research institutions of ministries and departments is approved and terminated by the Ministry of Higher and Secondary Specialized Education U.S.S.R. and under scientific research institutions of the Academy of Sciences U.S.S.R. and the academies of sciences of the union republics by the presidium of the appropriate academy.

4. Development of annual and long-range plans for training scientific cadres, through graduate study is accomplished by the State Committee for the Coordination of Scientific Research Work of the Council of Ministers U.S.S.R. together with *Gosplan* [State Planning Commission] U.S.S.R., the State Economic Council U.S.S.R., the Ministry of Higher and Secondary Specialized Education U.S.S.R., and the Academy of Sciences U.S.S.R.

5. Graduate study is organized both full time and part time. Length of training in a full-time graduate course should not exceed 3 years and in a part-time graduate course 4 years.

Admission to a Graduate Course

1. The full-time graduate course accepts U.S.S.R. citizens no older than 35 years and the part-time graduate course no older than 45 years, having complete higher education, having shown abilities for scientific research work, and having at least 2 years practical work experience in the elected scientific specialty after finishing a higher educational institution.

The appropriate work dispositions after completing a higher educational institution in the selected scientific specialty are determined by the admissions commission of the higher educational institution or scientific research institution conducting the enrollment in the graduate course.

Young specialists are permitted to participate in noncompetitive examinations for graduate study immediately after finishing H.E.I. only on a decision of the councils of higher educational institutions (faculties) for training them as scientific cadres in theoretical disciplines and in theoretical sections of sciences.

Graduates of correspondence-extension and evening higher educational institutions having at least 2 years' practical work experience in their selected scientific specialty can be permitted by the admissions commissions to take entrance examinations in graduate courses immediately after finishing H.E.I.'s.

Persons sent to full-time graduate study by higher educational institutions, industrial enterprises, State farms, collective farms, scientific research institutions, and other organizations are accepted under the general rules, but, under other various conditions they enjoy priority when enrolling. Persons sent to full-time graduate study should have at least 2 years' practical work experience. Specialists who have finished a graduate course return to the organization which sent them for study.

2. Persons who previously finished a graduate course or an assistantship do not have the right to a second term in a graduate course as well as privileges connected with completing work on a dissertation.

3. An application concerning admission to graduate study is submitted to the rector of the higher educational institution or the director of the scientific research institution offering training of graduate students, with the following enclosures:

a. Personal registration form with a photograph.

b. References from the last place of employment.

c. A list of published scientific work, scientific technical reports, and information concerning inventions and experimental design work. Persons not having published scientific works, scientific technical reports, or experimental design work and inventions must present scientific reports in the elected specialty.

d. Extracts from the minutes of the meeting of the council for persons recommended to graduate study by the councils of the H.E.I.'s (faculties) immediately after finishing a higher educational institution.

e. Certification on Form No. 6 about taking the candidate examinations stipulated for a certain specialty for persons who have taken full or partial candidate examinations.

f. Passport and diploma concerning completion of a higher educational institution, to be presented personally by those entering graduate study.

4. Enrollment in graduate study is conducted annually at dates established by the higher educational institutions and scientific research institutions.

5. An admissions commission under the chairmanship of the rector of the higher educational institution or the director of the scientific research institution is organized to conduct enrollment in graduate study. Members of the admissions commissions are appointed by the rector of the H.E.I. or the director of the scientific research institution from heads of chairs, sectors, and laboratories. Representatives of social organizations are included in the commission.

6. The decision concerning admittance to entrance examinations for graduate study is made by the admissions commission taking into account the review by the future scientific director on the presented scientific work, scientific-technical reports, inventions, and experimental design work and should be reported to the applicant no later than one month from the day the application is received.

7. Persons recommended and admitted to examinations immediately after finishing a higher educational institution are allowed to retain the stipend received, but for no more than 2 months after finishing the higher educational institution, and it is paid by the higher educational institution which gave the recommendation.

8. Persons entering graduate study take competitive examinations in their specialty, history of the CPSU [Communist Party of the Soviet Union] and one foreign language (English, French, German, Spanish, or Italian) in the volume of the program for H.E.I.'s.

The entrance examination in a specialty should precede examinations in other disciplines. The retaking of examinations is not allowed. Entrance examinations in graduate study are valid for one calendar year.

9. Persons who have fully taken candidate examinations stipulated for a certain specialty are released from entrance examinations when applying for graduate study. Those who have taken partial candidate minimum examinations, on personal application can be released from taking corresponding entrance examinations by a decision of the admissions commission. In this case, the marks of the candidate examinations are taken into consideration. Persons who have taken candidate minimum examinations partially and have scientific works and inventions are allowed to take candidate examinations in place of entrance examinations on the same dates.

By a decision of the admissions commission, the training term in the graduate course is reduced, but by no more than 1 year, for persons accepted in a graduate course, having taken full or partial candidate examinations.

10. Entrance examinations in a graduate course are conducted by commissions appointed by the director of the institution offering graduate training. The commission includes a professor or doctor of sciences in that specialty in which the examination is given.

In the absence of doctors of sciences, the commission can include candidates of sciences, docents, and, for foreign-language examinations, also qualified teachers having no academic degree or rank.

11. Persons allowed to take examinations for full-time or part-time graduate study are granted additional leave of 30 calendar days with retention of pay from the place of work in order to prepare for and take examinations.

Persons accepted in graduate study, having taken the partial candidate examination, are granted additional paid leave to take the remaining entrance examinations, with 10 days for each examination.

Additional leave is granted for travel from place of work to the H.E.I. or scientific research institution. Expenses for the trip are met by the applicant.

12. On the basis of the findings by a scientific director, the results of the competitive examinations, and a personal interview with the applicants, the admissions commission makes a decision concerning each candidate.

Enrollment in graduate study is conducted by an order of the rector of the H.E.I. or the director of the scientific research institution in accordance with the plan for admission of graduate students in specialties.

Upon finishing enrollment in graduate study, the rectors of H.E.I.'s and the directors of scientific research institutions within 10 days present to the ministry or department lists of those enrolled in graduate study.

The directors of scientific institutions of the Academy of Sciences U.S.S.R. and of the academies of sciences of the union republics within 10 days present to the appropriate presidium of the academy a copy of the order concerning enrollment.

13. The decision concerning admittance or rejection is reported to the applicant within 4 days after the decision has been made by the admissions commission.

14. Directors of institutions and enterprises are obliged to release from work persons accepted in a full-time graduate course at least 2 weeks before the beginning of studies.

15. Persons accepted in graduate study full time are paid stipends from the day of enrollment.

Training of Graduate Students

1. To give assistance to each graduate student in fulfilling scientific research on the elected theme, the rector of the H.E.I. or the director of the scientific research institution approves a scientific director from the doctors of sciences or professors.

With permission from the Ministry of Higher and Secondary Specialized Education U.S.S.R., in some cases candidates of sciences having substantial scientific achievements can be attached to the scientific supervision of the training of graduate students.

A scientific director advises a graduate student on scientific work and controls his fulfillment of an established plan.

2. A graduate student works on an individual plan confirmed by the council of the higher educational institution (faculty) or scientific research institution for the whole period of training in the graduate course.

3. At least 3 months from the day of enrolling the graduate students, the councils of the H.E.I.'s and scientific research institutions confirm the themes for themes for scientific work, which must be on contemporary problems both in theory and in practice.

4. Periodically, the graduate student reports on fulfillment of the individual plan at meetings of the chair (department, sector, laboratory) and is certified annually by the director. The certification is confirmed by the rector of the H.E.I. or the director of the scientific research institution.

A graduate student failing to show ability in scientific research and failing to fulfill the individual work plan within the established time, without valid reasons, is dismissed from the graduate course by the rector of the H.E.I. or director of the scientific research institution and is sent to work as a young specialist. The list of those dismissed from the graduate course is sent to the ministry or department.

5. Responsibility for fulfilling the confirmed plans for enrolling and graduating graduate students and organizing their training in H.E.I.'s and scientific research institutions is charged to the directors of H.E.I.'s and scientific research institutions, heads of chairs, and scientific directors.

6. Responsibility for the organization of work of those enrolled in a graduate course is charged to the head of the graduate study or an official appointed by the rector of the H.E.I. or the director of the scientific research institution.

Rights and Duties of Graduate Students

1. The graduate student participates daily in the scientific life of the collective of the chair (laboratory) and in his research on an elected theme, he is obliged to actively promote the fulfillment of the whole plan for scientific research for which the scientific director is responsible.

During his stay in a graduate course, the graduate student, in accordance with the individual plan, must take candidate examinations and defend or present for defense a candidate dissertation within the established time. The dissertation must contain new scientific and practical conclusions and recommendations and reveal the ability of the graduate student for independent scientific research, profound theoretical knowledge in the field of a certain discipline, and specialized knowledge on questions of the dissertation.

During their stay in a graduate course, graduate students take candidate examinations in dialectical and historical materialism, one foreign language, and a specialized discipline in accordance with the dissertation theme. The volume of material for the candidate examination in a specialty is determined by the chair.

Graduate students of H.E.I.'s are also obliged to do pedagogical practice, the volume and content of which are determined by the chair.

Those who have finished graduate study are considered persons who have taken the candidate examinations and defended or presented for defense a candidate dissertation within the established time of stay in a graduate course.

Persons who have presented the candidate dissertation for defense by the established date are issued a certificate.

2. Graduate students may use the equipment, laboratories, study rooms, and libraries and have the right to go away on business and to participate in expeditions, etc., to work on the elected theme equally with the scientific pedagogical staff of an H.E.I. and scientific workers of a scientific research institution.

3. Full-time graduate students are provided stipends at a fixed rate. Persons who have entered graduate study with at least 2 years' practical work experience after finishing an H.E.I., including those who have finished correspondence and evening H.E.I.'s, have had at least 2 years' practical work experience in the elected specialty; and have received wages higher than the existing stipend are given a stipend at a rate of the basic pay received, but no more than 100 rubles a month.

4. Each full-time graduate student is given an annual allowance equal to his monthly stipend to acquire scientific literature.

5. Full-time graduate students have an annual 2-month vacation.

6. Part-time graduate students successfully fulfilling the individual plan are granted additional annual leave by their place of employment while retaining the salary for 30 calendar days for taking candidate examinations and fulfilling work on their dissertation.

7. Full-time graduate students are not allowed to mix training in a graduate course with work. In individual cases, the graduate students can be attached to economic contract scientific research work in the same higher educational institution or scientific research institution if the theme of the contract work corresponds to the dissertation theme, with payment of salary no more than 50-percent of the salary for the position of junior scientific associate with up to 5 years' experience. A graduate student is given permission to do this work by the H.E.I. rector or the director of the scientific research institution.

Graduate students of chairs of H.E.I.'s successfully fulfilling the plan for graduate training can, with the rector's permission, do paid pedagogical work in a specialty above the plan of graduate pedagogical practice, under the conditions of hourly wages but receiving no more than 50 percent of an assistant's pay, if they do not fulfill economic contract scientific research work.

8. All full-time graduate students, after completing the term of graduate training, are subject to assignment and are obliged, in accordance with decree No 1709 of 22 May 1948 of the Council of Ministers U.S.S.R., to work at least 3 years in H.E.I. scientific research institutions, and other organizations to which they are sent by the ministries and departments which supervise the H.E.I.'s research institutions, and other organizations.

9. The procedure for sending those finishing full-time graduate study to work is established by the ministries and departments which supervise the H.E.I.'s and scientific research institutions.

10. On the basis of a decree of the Council of Ministers U.S.S.R., persons who have finished a full-time graduate course may not be accepted for work without a pass from the ministries and departments.

Graduate Study of Special Purpose (Tselevaja aspirantura)

1. Graduate study of special purpose is a form of training scientific pedagogical and scientific cadres for higher educational institutions, scientific research institutions, industrial enterprises, state farms, collective farms, and other organizations both for a certain republic and for other union republics not having an opportunity to train scientific pedagogical and scientific cadres at their own institutions.

2. Full-time graduate study of special purpose enrolls mainly persons sent from the union republics by higher educational institutions, industrial enterprises, state farms, collective farms, scientific research institutions, and other organizations.

3. Enrollment of these persons in graduate study is conducted by higher educational institutions and scientific research institutions without competition, in strict accordance with the confirmed plan for admission to graduate study of special purpose and on the established dates.

4. The plan for enrollment in graduate study of special purpose is confirmed each year by the Ministry of Higher and Secondary Specialized Education U.S.S.R. in agreement with the State Committee for the Coordination of Scientific Research Work of the Council of Ministers U.S.S.R. within the limits of the general plan for enrollment in graduate study.

5. Entrance examination in history of the CPSU and foreign language for persons sent to graduate study of special purpose can be held at the place of employment in agreement with the H.E.I. or scientific research institution conducting the admission to graduate study of special purpose, but examinations in a specialized subject are held only in the H.E.I. or scientific research institution.

6. All the expenses connected with the training of graduate students in graduate study of special purpose are met by the higher educational institutions and scientific research institutions in which these graduate students take their training.

7. Specialists who have completed the graduate course of special purpose are returned to the organization which sent them.

8. Persons from scientific institutions of the academies of sciences of the union republics are sent to full-time graduate study of the scientific institutions of the Academy of Sciences U.S.S.R. in those specialties in which the local places have have no scientific directors or material-technical base (new equipment, instruments, and machines).

All expenses connected with the training of graduate students in the Academy of Sciences U.S.S.R. are met by the academies of sciences of the union republics

1-Year Graduate Study

1. A graduate course with a training term of up to one year under higher educational institutions enrolls instructors and other H.E.I. workers and secondary school teachers no older than 45 years to complete scientific research work on a selected theme and to prepare and defend a dissertation for the degree of candidate of sciences. The training term includes leave.

2. The 1-year graduate course enrolls instructors and other H.E.I. workers and secondary school teachers having scientific or pedagogical work experience, having fully taken the candidate examinations, and having fulfilled scientific research work on a selected theme in a volume sufficient to prepare and defend a dissertation on the basis of this work and during the training in a 1-year graduate course.

Instructors and other H.E.I. workers and secondary school teachers who have taken a full course of graduate training or assistantship do not have the right to be sent to a 1-year graduate course.

3. Instructors and other H.E.I. workers and secondary school teachers enrolled in a 1-year graduate course keep their position and the basic salary in that position.

Stipends are not paid to those enrolled in a 1-year graduate course and they are not allowed to mix training with work for the entire training term. No payment is made for travel.

4. Persons enrolled in a 1-year graduate course return to their former place of employment after finishing the term in the graduate course.

APPENDIX E

Higher Educational Institutions of the U.S.S.R. (by city)

The listing which follows contains 856 entries, of which 739 are higher educational institutions (H.E.I.) and 117 are H.E.I. branches, including affiliates, correspondence faculties, evening affiliates, faculties, and divisions. These higher schools are located in 279 Soviet cities and towns, with the greatest concentrations in Moscow (73 H.E.I. and branches) and in Leningrad (39).

Over half of the total, or 442 higher schools and branches, are located in 36 cities. Aside from Moscow and Leningrad, the 16 cities with 10 or more entries are: Alma-Ata, Erevan, Gorkii, Kazan, Kharkov, Kiev, Lvov, Minsk, Novosibirsk, Odessa, Rostov-on-Don, Saratov, Svedlovsk, Tashkent, Tbilisi, and Voronezh. Moscow, Leningrad and these 16 cities contain 315 H.E.I. and branches, or well over one-third of the total number of higher educational institutions.

The breakdown of the total (excluding their branches) for the 1960–61 school year, by republic, is:

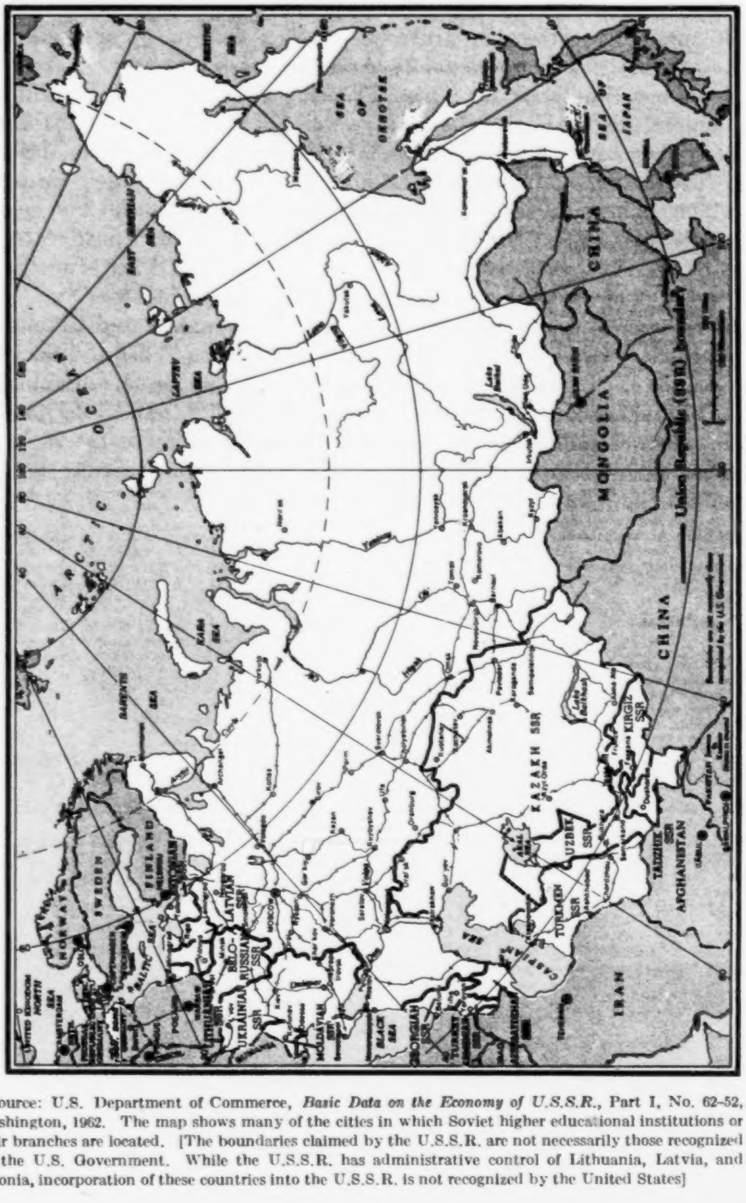
Republic	*H.E.I.*
Russian SFSR	430
Ukrainian SSR	135
Uzbek SSR	30
Kazakh SSR	28
Belorussian SSR	24
Georgian SSR	18
Azerbaidzhan SSR	12
Lithuanian SSR	12
Armenian SSR	10
Latvian SSR	10
Kirziz SSR	8
Estonian SSR	6
Moldavian SSR	6
Tadzhiz SSR	6
Turkmen SSR	4

Over two-thirds of the higher schools are in the two most heavily populated republics, the Russian SFSR and the Ukrainian SSR.

In addition to undergraduate studies, graduate training (*aspirantura*) is provided in 360 of the 856 H.E.I. and branches. Graduate programs are also offered in research institutes of the U.S.S.R. and republic academies of science and in industrial research institutes. These research organizations, which are concerned primarily with scientific work and not with academic studies, constitute about half of the institutions providing advanced training and degrees. A listing of these institutions is provided in *Aspirantura, Spravochnik dlia postupaiushchikh v aspiranturu i soiskatelei uchenykh stepenei* (Graduate Training, Handbook for Those Entering Graduate Training and for Competitors for Higher Degrees), published by the U.S.S.R. Ministry of Higher and Specialized Secondary Education, Moscow, in 1960.

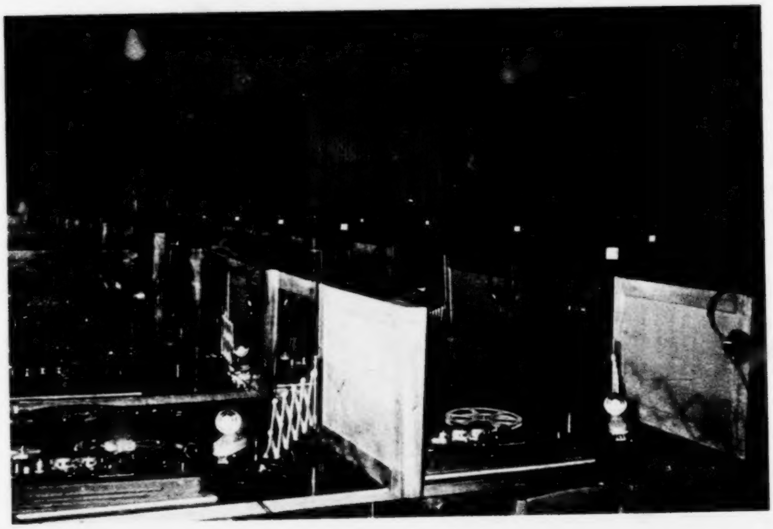
The listing of higher educational institutions and their branches which follows is from *Spravochnik dlia postupaiushchikh v vysshie uchebnye zavedenye SSSR v 1962 godu* (Handbook for Those Entering U.S.S.R. VUZy in 1962), published by the U.S.S.R. Ministry of Higher and Specialized Secondary Education, Moscow, in 1962. Cities and towns listed without constituent republic designation are generally located in the RSFSR (Russian Soviet Federated Socialist Republic). Other abbreviations are: avt. (autonomous), obl. (oblast), ASSR (Autonomous Soviet Socialist Republic) and SSR (Soviet Socialist Republic). The various geographic-administrative units (krai, oblast, autonomous oblast and ASSR) are generally located within the RSFSR unless otherwise indicated.

HIGHER EDUCATION IN THE USSR

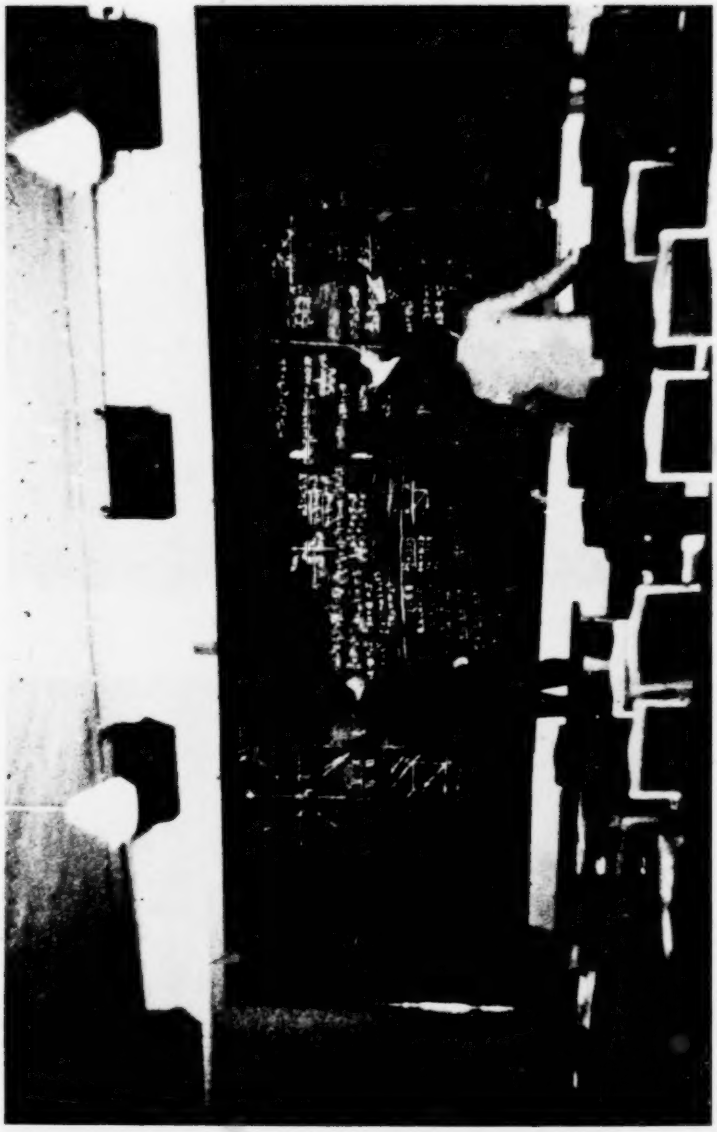

ARCTIC OCEAN
BARENTS SEA
KARA SEA
LAPTEV SEA
EAST SIBERIAN SEA
BERING SEA
SEA OF OKHOTSK
SEA OF JAPAN
NORTH SEA
BALTIC SEA
BLACK SEA
CASPIAN SEA
ARAL SEA
Lake Baykal
NORWAY
SWEDEN
FINLAND
ESTONIAN SSR
LATVIAN SSR
LITHUANIAN SSR
BELORUSSIAN SSR
UKRAINIAN SSR
MOLDAVIAN SSR
GEORGIAN SSR
TURKEY
IRAN
TURKMEN SSR
UZBEK SSR
KAZAKH SSR
KIRGIZ SSR
TADZHIK SSR
AFGHANISTAN
PAKISTAN
CHINA
MONGOLIA
JAPAN
Union Republic (SSR) boundary

Source: U.S. Department of Commerce, ***Basic Data on the Economy of U.S.S.R.***, Part I, No. 62-52, Washington, 1962. The map shows many of the cities in which Soviet higher educational institutions or their branches are located. [The boundaries claimed by the U.S.S.R. are not necessarily those recognized by the U.S. Government. While the U.S.S.R. has administrative control of Lithuania, Latvia, and Estonia, incorporation of these countries into the U.S.S.R. is not recognized by the United States]

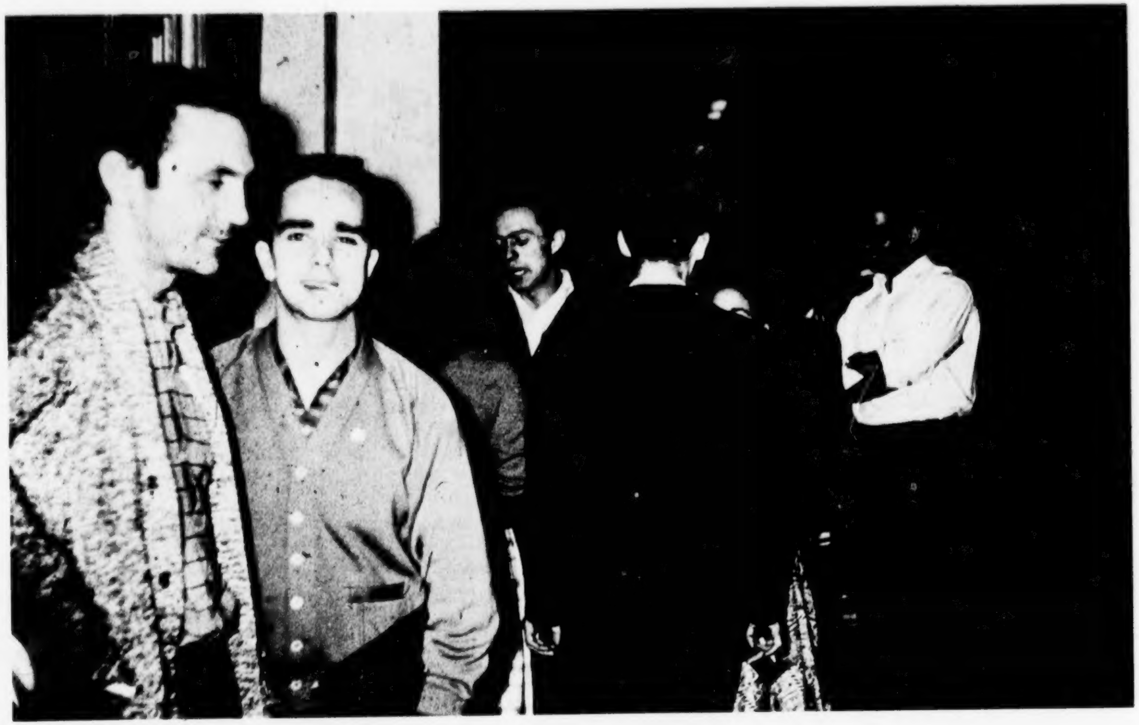
Moscow State University classroom



Language laboratory in People's Friendship University



Students taking final examinations at the Northwest Correspondence Polytechnical Institute in Leningrad



Latin American students in corridor of Peoples Friendship University, Moscow

HIGHLIGHTS ON SELECTED HIGHER SCHOOLS

Name	Date founded	Enrollment (1960–61) (rounded to thousands)	Faculties; divisions
All-Union Correspondence Polytechnical Institute (Moscow).	1932	40, 000	Mining, Petroleum, Metallurgy, Machine Building, Automechanics, Power, Electrophysics, Construction, Engineering-Economics; Evening.
Kazakh (Kirov) State University (Alma Ata).	1934	12, 000	History, Philology, Law, Economics, Mechanics-Mathematics, Physics, Chemistry, Biology-Soil, Geography; Evening, Correspondence.
Kiev (Shevchenko) State University.	1834	11, 000	History-Philosphy, Philology, Journalism, Law-Economics, Mechanics-Mathematics, Physics, Chemistry, Radiophysics, Biology, Geology, Geography; Evening, Correspondence.
Leningrad (Gertsen) State Pedagogical Institute.	1918	12, 000	History-Philology, Mathematics and Mechanical Drawing, Physics and Fundamentals of Production, Natural Sciences, Geography, Foreign Languages, Defectology, Graphic Arts, Pedagogy, Physical Education; Evening, Correspondence.
Leningrad (Zhdanov) State University.	1819	14, 000	History, Economics, Philosophy, Philology, Orient, Law, Physics, Mathematics-Mechanics, Chemistry, Biology-Soil, Geology, Geography; Evening, Correspondence.
Moscow (Bauman) Higher Technical School.	1830	13, 000	Industrial Automation and Mechanization, Power Machine Building, Transport Machine Building, Instrument Making, Machine Building; 2 Evening Faculties.
Moscow (Lomonosov) State University.	1775	22, 000	History, Philology, Journalism, Philosophy, Economics, Law, Physics, Mechanics-Mathematics, Chemistry, Biology-Soil, Geology, Geography; Evening Correspondence; Institute of Eastern (Oriental) Languages.
Northwest Correspondence Polytechnical Institute (Leningrad).	1929	20, 000	Ship Building, Machine Building, Mechanics-Technology, Metallurgy, Radiotechnics, Thermal Power, Electric Power, Chemistry-Technology; Evening.

Novosibirsk State University	1959	1, 000	Mechanics-Mathematics, Physics, Natural Sciences, Humanities; Evening.
Peoples Friendship (Lumumba) University (Moscow).	1960	1, 000	Preparatory, Engineering, Agriculture, Medicine, Physics-Mathematics-Natural Sciences, History-Philology, Economics-Law.
Tbilisi State University	1918	9, 000	History, Philosophy, Philology, Western European Languages and Literature, Economics, Law, Mechanics-Mathematics, Physics, Chemistry, Biology, Geology-Geography; Evening, Correspondence.

HIGHER EDUCATIONAL INSTITUTIONS OF THE U.S.S.R.[1]

[Asterisks indicate institutions which provide graduate (*aspirantura*) as well as undergraduate studies]

City[2]	Institution	Address
1. Abakan, Krasnoiarskogo kraia, Khasskoi avt. obl.	Pedagogicheskii institut (Pedagogical Institute)	prosp. Lenina, 82
2. Aktiubinsk, Kazakhskoi SSR	Meditsinskii institut (Medical Institute)	ul. Lenina, 78
3. Aleksandrovsk, Permskoi obl.	Zaochnoe otdelenie Permskogo politekhnicheskogo instituta (Correspondence Division of the Perm Polytechnical Institute)	
4. Alma-Ata, Kazakhskoi SSR	*Kazakhskii gosudarstvennyi universitet (Kazakh State University)	ul. Kirova, 136
	Kazakhskii politekhnicheskii institut (Kazakh Polytechnical Institute)	Universitetskaia ul., 22
	*[Graduate training at Mining and Metallurgy Institute, same address]	
	*Kazakhskii sel'skokhoziaistvennyi institut (Kazakh Agricultural Institute)	prosp. Abaia, 8
	*Zooveterinarnyi institut (Zooveterinary Institute)	prosp. Abaia, 24
	*Meditsinskii Institut (Medical Institute)	Komsomol'skaia ul., 96
	*Kazakhskii pedagogicheskii institut (Kazakh Pedagogical Institute)	Komsomol'skaia ul., 31
	Kazakhskii zhenskii pedagogicheskii institut (Kazakh Pedagogical Institute for Women)	ul. Gogolia, 23
	Gosudarstvennaia konservatoriia (State Conservatory)	Kommunisticheskii prosp., 90
	Kazakhskii institut fizicheskoi kul'tury (Kazakh Institute of Physical Culture)	Sovetskaia ul., 22

	Filial Vsesoiuznogo zaochnogo instituta pishchevoi promyshlennosti (Affiliate of the All-Union Correspondence Institute of the Food Industry)	Komsomol'skaia ul., 72
	Filial Vsesoiuznogo zaochnogo inzhenerno-stroitel'nogo instituta (Affiliate of the All-Union Correspondence Engineering-Construction Institute)	ul. Abaia, 126
	Filial zaochnogo instituta sovetskoi torgovli (Affiliate of the Correspondence Institute of Soviet Trade)	Internatsional'naia, ul., 71
	Filial zaochnogo fakul'teta Moskovskogo kooperativnogo instituta (Affiliate of the Correspondence Faculty, Moscow Cooperative Institute)	
5. Almalyk, Uzbekskoi SSR	Vechernee otdelenie Tashkentskogo politekhnicheskogo instituta (Evening Division of the Tashkent Polytechnical Institute)	
6. Al'met'evsk, Tatarskoi ASSR	Vechernii fakul'tet Moskovskogo instituta neftekhimicheskoi i gazovoi promyshlennosti (Evening Faculty of the Moscow Institute of the Petrochemical and Gas Industry)	ul. K. Tsetkin, 12
7. Andizhan, Uzbekskoi SSR	Pedagogicheskii institut (Pedagogical Institute)	ul. Lenina, 8
	*Meditsinskii institut (Medical Institute)	Dom Sovetov
8. Angarsk, Irkutskoi obl.	Vechernii fakul'tet Irkutskogo politekhnicheskogo instituta (Evening Faculty of the Irkutsk Polytechnical Institute)	
9. Arkhangel'sk	*Lesotekhnicheskii institut (Forestry Technical Institute)	naberezhnaia im. Lenina, 17
	Meditsinskii institut (Medical Institute)	prosp. Vinogradova, 51
	Pedagogicheskii institut (Pedagogical Institute)	Petrogradskii prosp., 4
10. Armavir	Pedagogicheskii institut (Pedagogical Institute)	ul. Rozy Liuksemburg, 115

See footnotes at end of table.

City [2]	Institution	Address
11. Arzamas, Gor'kovskoi obl.	Pedagogicheskii institut (Pedagogical Institute)	ul. K. Marksa, 36
12. Ashkhabad, Turkmenskoi SSR	*Turkmenskii gosudarstvennyi universitet (Turkmen State University)	prosp. V. I. Lenina, 31
	Turkmenskii sel'skokhoziaistvennyi institut (Turkmen Agricultural Institute)	Sad Keshi, Pervomaiskaia, 62
	*Turkmenskii meditsinskii institut (Turkmen Medical Institute)	ul. Shaumiana, 58
	Filial Vsesoiuznogo zaochnogo finansovo-ekonomicheskogo instituta (Affiliation of the All-Union Correspondence Finance-Economics Institute)	ul. Shevchanko, 6
13. Astrakhan	*Tekhnicheskii institut rybnoi promyshlennosti i khoziaistva (Technical Institute of the Fishing Industry and Economy)	ul. Tatishcheva, 16
	Meditsinskii institut (Medical Institute)	ul. Mechnikova, 20
	Pedagogicheskii institut (Pedagogical Institute)	ul. Shaumiana, 1
14. Baku, Azerbaidzhanskoi SSR	*Azerbaidzhanskii gosudarstvennyi universitet (Azerbaidzhan State University)	Kommunisticheskaia ul., 6
	Azerbaidzhanskii politekhnicheskii institut (Azerbaidzhan Polytechnical Institute)	prosp. Narimanova, 25
	*Azerbaidzhanskii institut nefti i khimii (Azerbaidzhan Petroleum and Chemistry Institute)	prosp. Lenina, 20
	*Azerbaidzhanskii meditsinskii institut (Azerbaidzhan Medical Institute)	ul. Karganova, 13
	*Azerbaidzhanskii pedagogicheskii institut im. V. I. Lenina (Azerbaidzhan V. I. Lenin Pedagogical Institute)	ul. Shaumiana, 39

	Azerbaidzhanskii pedagogicheskii institut iazykov im. Mirzy Fatali Akhundova (Azerbaidzhan M. F. Akhundov Pedagogical Institute of Languages)	ul. Shmidta, 59
	Azerbaidzhanskaia gosudarstvennaia konservatoria (Azerbaidzhan State Conservatory)	ul. Dimitrova, 98
	Gosudarstvennyi teatral'nyi institut (State Theatrical Institute)	per. Nizami, 1
	Azerbaidzhanskii gozudarstvennyi institut fizicheskoi kul'tury (Azerbaidzhan State Institute of Physical Culture)	ul. Sameda Vurguna, 25
	Filial Vsesoiuznogo zaochnogo instituta pishchevoi promyshlennosti (Affiliate of the All-Union Correspondence Institute of the Food Industry)	ul. Chapeava, 49
15. Balashikha, Moskovskoi obl.	Vsesoiuznyi sel'skokhoziaistvennyi institut zaochnogo obrazovaniia (All-Union Agricultural Correspondence Institute)	pos. Leonovo
16. Balashov, Saratovskoi obl.	Pedagogicheskii institut (Pedagogical Institute)	
17. Balkhash, Kazakhskoi SSR	Vechernii fakul'tet Karagandinskogo politekhnicheskogo instituta (Evening Faculty of the Karaganda Polytechnical Institute)	
18. Barnaul, Altaiskogo kraia	Altaiskii politekhnicheskii institut (Altai Polytechnical Institute)	prosp. Lenina, 61
	*Altaiskii sel'skokhoziaistvennyi institut (Altai Agricultural Institute)	Pushkinskaia ul., 82
	Altaiskii meditsinskii institut (Altai Medical Institute)	prosp. Lenina, 40
	Pedagogicheskii institut (Pedagogical Institute)	ul. Krupskoi, 108
	Filial Vsesoiuznogo zaochnogo instituta tekstil'noi i legkoi promyshlennosti (Affiliate of the All-Union Correspondence Institute of the Textile and Light Industry)	Polevaia ul., 5

See footnotes at end of table.

City [2]	Institution	Address
19. Batumi	Pedagogicheskii institut (Pedagogical Institute)	ul. Ninoshvili, 35
20. Belaia Tserkov Kievskoi obl., Ukrainskoi SSR	Sel'skokhoziaistvennyi institut (Agricultural Institute)	ul. Svobody, 7/1
21. Belgorod, oblastnoi	Pedagogicheskii institut (Pedagogical Institute)	
22. Beloretsk, Bashkirskoi ASSR	Vechernee otdelenie Magnitogorskogo gornometallurgicheskogo instituta (Evening Division of the Magnitogorsk Mining-Metallurgy Institute)	
23. Bel'tsy, Moldarskoi SSR	Pedagogicheskii institut (Pedagogical Institute)	ul. Pushkina, 32
24. Berdiansk, Zaporozhskoi obl., Ukrainskoi SSR	Pedagogicheskii institut Pedagogical Institute)	ul. Shmidta, 8
25. Berdichev, Zhitomirskoi obl., Ukrainskoi SSR	Pedagogicheskii institut (Pedagogical Institute)	ul. K. Libknekhta, 49
26. Biisk, Altaiskogo kraia	Pedagogicheskii institut (Pedagogical Institute)	Sovietskaia ul., 11
	Vechernii filial Altaiskogo politekhnicheskogo instituta (Evening Affiliate of the Altai Polytechnical Institute)	
27. Birsk, Bashkirskoi ASSR	Pedagogicheskii institut (Pedagogical Institute)	
28. Blagoveshchensk-na-Amure	Sel'skokhoziaistvennyi institut (Agricultural Institute)	Politekhnicheskaia ul., 50
	Pedagogicheskii institut (Pedagogical Institute)	ul. Lenina, 104
	Meditsinskii institut (Medical Institute)	ul. Lenina, 124

	Obshchetekhnicheskii fakul'tet Khabarovskogo avtomobil'no-dorozhnogo instituta (General Technical Faculty of the Khabarov Automobile-Highway Institute)	
29. Borisoglebsk, Voronezhskoi obl.	Pedagogicheskii institut (Pedagogical Institute)	Narodnaia ul., 43
30. Bratsk	Obshchetekhnicheskii fakul'tet c vechernei i zaochnoi sistemami obucheniia Irkutskogo politekhnicheskogo instituta (General-Technical Faculty of the Irkutsk Polytechnical Institute with Evening and Correspondence Systems of Education)	
31. Brest	Pedagogicheskii institut (Pedagogical Institute)	Sovetskaia ul., 8
32. Briansk, oblastnoi	*Institut transportnogo mashinostroeniia (Institute of Transport Machine Construction)	Institutskaia ul., 16
	Tekhnologicheskii institut (Technological Institute)	Sovetskaia ul., 18
33. Bronnitsa, Moskovskoi obl.	Filial vechernego fakul'teta Moskovskogo avtomobil'no-dorozhnogo instituta (Affiliate of the Evening Faculty of the Moscow Automobile-Highway Institute)	
34. Bukhara, Uzbekskoi, SSR	Pedagogicheskii institut (Pedagogical Institute)	
	Vechernee otdelenie Tashkentskogo politekhnicheskogo instituta (Evening Division of the Tashkent Polytechnical Institute)	
35. Chardzhou, Turkmenskoi SSR	Turkmenskii pedagogicheskii institut (Turkmen Pedagogical Institute)	Tashkeprinskaia ul., 56
36. Cheboksary, Chuvashskoi ASSR	Sel'skokhoziaistvennyi institut (Agricultural Institute)	ul. K. Marksa, 29
	*Chuvashskii pedagogicheskii institut (Chuvash Pedagogical Institute)	ul. Karla Marksa, 42

See footnotes at end of table.

City [2]	Institution	Address
37. Cheliabinsk	*Politekhnicheskii institut (Polytechnical Institute)	ul. Spartaka, 90
	*Institut mekhanizatsii i elektrifikatsii sel'skogo khoziaistva (Institute of the Mechanization and Electrification of Agriculture)	Krasnaia ul., 38
	*Pedagogicheskii institut (Pedagogical Institute)	prosp. Lenina, 69
	*Meditsinskii institut (Medical Institute)	ul. Kommuny, 35
38. Cheremkhovo, Irkutskoi obl.	Vechernii fakul'tet Irkutskogo politekhnicheskogo instituta (Evening Faculty of the Irkutsk Polytechnical Institute)	
39. Cherepovets, Vologodskoi obl.	Pedagogicheskii institut (Pedagogical Institute)	prosp. Lunacharskogo, 5
40. Cherkassy, oblastnoi, Ukrainskoi SSR	Pedagogicheskii institut (Pedagogical Institute)	ul. Karla Marksa, 24
	Obshchetekhnicheskii zaochnyi fakul'tet Kievskogo inzhenerno-stroitelnogo instituta (General Technical Correspondence Faculty of the Kiev Engineering-Construction Institute)	ul. Sverdlova, 24
41. Chernigov, Ukrainskoi SSR	Pedagogicheskii institut (Pedagogical Institute)	ul. Sverdlova, 53
	Obshchetekhnicheskii zaochnyi fakul'tet Kievskogo politekhnicheskogo instituta (General Technical Correspondence Faculty of the Kiev Polytechnical Institute)	ul. Sverdlova, 53
42. Chernovtsy, Ukrainskoi SSR	*Gosudarstvennyi universitet (State University)	Universitetskaia ul., 28
	*Meditsinskii institut (Medical Institute)	Teatral'naia ul., 2

43. Chimkent, Kazakhskoi SSR	Kazakhskii tekhnologicheskii institut (Kazakh Technological Institute)	Komsomol'skaia ul., 23
	Pedagogicheskii institut (Pedagogical Institute)	Sovetskaia ul., 40
44. Chirchik, Uzbekskoi SSR	Vechernee otdelenie Tashkentskogo politekhnicheskogo instituta (Evening Division of the Tashkent Polytechnical Institute)	
45. Chistiakovo, Donetskoi obl., Ukrainskoi SSR	Obshchetekhnicheskii zaochnyi fakul'tet Donetskogo politekhnicheskogo instituta (General Technical Correspondence Faculty of the Donets Polytechnical Institute)	
46. Chita	Meditsinskii institut (Medical Institute)	ul. Chkalova 126
	Pedagogicheskii institut (Pedagogical Institute)	ul. Chkalova, 140
	Filial Vsesoiuznogo iuridicheskogo zaochnogo instituta (Affiliate of the All-Union Juridical Correspondence Institute)	ul. Kalinina, 56
47. Daugavpils, Latviiskoi SSR	Pedagogicheskii Institut (Pedagogical Institute)	ul. 5 Avgusta, 13
48. Dneprodzerzhinsk, Ukrainskoi SSR	Dneprodzerzhinskii metallurgicheskii zavod-vtuz (Dneprodzerzhinsk Metallurgical Plant Higher Technical Institution)	prosp. Lenina, 16
49. Dnepropetrovsk	*Gosudarstvennyi universitet (State University)	Shevchenkovskaia ul., 59
	*Gornyi institut (Mining Institute)	prosp. Karla Marksa, 21
	*Inzhenerno-stroitel'nyi institut (Engineering Construction Institute)	ul. Chernyshevskogo, 24-a
	*Metallurgicheskii institut (Metallurgical Institute)	ul. Gagarina, 2-a
	*Khimiko-tekhnologicheskii institut (Chemical-Technological Institute)	ul. Gagarina, 2-g

See footnotes at end of table.

City [2]	Institution	Address
49. Dnepropetrovsk—Con.	*Institut inzhenerov zheleznodorozhnogo transporta (Institute of Railway Transportation Engineers)	Sevatopol'skaia ul., 15
	Sel'skokhoziaistvennyi institut (Agricultural Institute)	ul. 40 let Oktiabria, 25
	*Meditsinskii institut (Medical Institute)	ul. Dzerzhinskogo, 9
50. Donetsk	*Donetskii politekhnicheskii institut (Donets Polytechnical Institute)	ul. Artema, 58
	*Meditsinskii institut (Medical Institute)	Kalinovka, Makeevskoe shosse
	Pedagogicheskii institut (Pedagogical Institute)	Universitetskaia ul., 18
	Institut sovetskoi torgovli (Institute of Soviet Trade)	ul. Shchorsa, 31
51. Drogobych, Ukrainskoi SSR	Pedagogicheskii institut (Pedagogical Institute)	ul. Gogolia, 32
	Obshchetekhnicheskii zaochnyi fakul'tet L'vovskogo politekhnicheskogo instituta (General-Technical Correspondence Faculty of the Lvov Polytechnical Institute)	ul. Gogolia, 50
52. Dubliany, L'vovskoi obl., Ukrainskoi SSR	L'vovskii sel'skokhoziaistvennyi institut (Lvov Agricultural Institute)	
53. Dushanbe, Tadzhikskoi SSR	*Tadzhikskii gosudarstvennyi universitet (Tadzhik State University)	ul. Lenina, 17
	Tadzhikskii politekhnicheskii institut (Tadzhik Polytechnical Institute)	ul. Kuibysheva, 5–a
	*Pedagogicheskii institut (Pedagogical Institute)	ul. Lenina, 139

	Tadzhikskii gosudarstvennyi meditsinskii institut (Tadzhik State Medical Institute)	prosp. Lenina, 123
	Tadzhikskii sel'skokhoziaistvennyi institut (Tadzhik Agricultural Institute)	ul. Shevchenko, 26
54. Dzerzhinsk, Gor'kovskoi obl.	Vechernii fakul'tet Gor'kovskogo politekhnicheskogo instituta (Evening Faculty of the Gorkii Polytechnical Institute)	
55. Dzhambul, Kazakhskoi SSR	Filial Kazakhskogo tekhnologicheskogo instituta (Affiliate of the Kazakh Technological Institute)	
56. Dzhezkazgan, Kazakhskoi SSR	Vechernii fakul'tet Karagandinskogo politekhnicheskogo instituta (Evening Faculty of the Karaganda Polytechnical Institute)	
57. Elabuga, Tatarskoi ASSR	Pedagogicheskii institut (Pedagogical Institute)	ul. Karla Marksa, 87
58. Elektrostal', Moskovskoi obl.	Vechernii fakul'tet Moskovskogo instituta stali (Evening Faculty of the Moscow Steel Institute)	
59. Elets, Lipetskoi obl.	Pedagogicheskii institut (Pedagogical Institute)	ul. Lenina, 85
60. Elgava, Latviiskoi SSR	Latviiskaia sel'skokhoziaistvennaia akademiia (Latvian Agricultural Academy)	ul. Lenina, 2
61. Eniseisk	Pedagogicheskii institut (Pedagogical Institute)	ul. Kirova, 62
62. Erevan, Armianskoi SSR	*Gosudarstvennyi universitet (State University)	ul. Aboviana, 104
	*Politekhnicheskii institut (Polytechnical Institute)	ul. Teriana, 105
	Zooveterinarnyi institut (Zooveterinary Institute)	ul. Nalbandiana, 128
	*Armianskii sel'skokhoziaistvennyi institut (Armenian Agricultural Institute)	ul. Teriana, 74
	Meditsinskii institut (Medical Institute)	ul. Kirova, 2

See footnotes at end of table.

City [2]	Institution	Address
62. Erevan, Armianskoi SSR—Continued	*Armianskii pedagogicheskii institut (Armenian Pedagogical Institute)	Moskovskaia ul., 5
	Armianskii zaochnyi pedagogicheskii institut (Armenian Correspondence Pedagogical Institute)	ul. Spandariana, 44
	Armianskii pedagogicheskii institut russkogo i inostrannykh iazykov (Armenian Pedagogical Institute of Russian and Foreign Languages)	ul. Pushkina, 25
	Armianskii gosudarstvennyi institut fizicheskoi kul'tury (Armenian State Institute of Physical Culture)	ul. Fizkul'turnikov, 23
	Gosudarstvennaia konservatoriia (State Conservatory)	ul. Kirova, 16
	Gosudarstvennyi khudozhestvenno-teatral'nyi institut (State Institute of Theatrical Arts)	prosp. Lenina, 93
63. Fergana, Uzbekskoi SSR	Pedagogicheskii institut (Pedagogical Institute)	
64. Frunze, Kirgizskoi SSR	*Kirgizskii gosudarstvennyi universitet (Kirgiz State University)	ul. Frunze, 193
	Politekhnicheskii institut (Polytechnical Institute)	ul. Togoloko-Moldo, 17
	*Kirgizskii sel'skokhoziaistvennyi institut (Kirgiz Agricultural Institute)	Aktiubinskaia ul., 34
	Kirgizskii zhenskii pedagogicheskii institut (Kirgiz Pedagogical Institute for Women)	Pervomaiskaia ul., 51
	*Kirgizskii gosudarstvennyi meditsinskii institut (Kirgiz State Medical Institute)	ul. Togoloko-Moldo, 1
	Kirgiz gosudarstvennyi institut fizicheskoi kul'tury (Kirgiz State Institute of Physical Culture)	Kievskaia ul., 132

	Filial Vsesoiuznogo zaochnogo finansovo-ekonomicheskogo instituta (Affiliate of the All-Union Correspondence Finance Economics Institute)	ul. Lenina, 173
65. Glazov, Udmurtskoi ASSR	Pedagogicheskii institut (Pedagogical Institute)	ul. Revoliutsii, 17
66. Glukhov, Sumskoi obl., Ukrainskoi SSR	Pedagogicheskii institut (Pedagogical Institute)	ul. Sovetskaia, 36
67. Gomel' Belorusskoi SSR	*Belorusskii institut inzhenerov zheleznodorozhnogo transporta (Belorussian Institute of Railway Transportation Engineers)	ul. Kirova, 68
	Pedagogicheskii institut (Pedagogical Institute)	ul. Kirova, 167
68. Gori, Gruzinskoi SSR	Pedagogicheskii institut (Pedagogical Institute)	prosp. Chavchavadze, 35
69. Gorki, Belorusskoi SSR	Belorusskaia sel'skokhoziaistvennaia akademiia (Belorussian Agricultural Academy)	
70. Gor'kii	*Gosudarstvennyi universitet (State University)	Arzamasskoe shosse, 17
	*Politekhnicheskii institut (Polytechnical Institute)	ul. K. Minina, 24
	*Inzhenerno-stroitel'nyi institut (Engineering Construction Institute)	Krasnoflotskaia ul., 65
	*Institut inzhenerov vodnogo transporta (Institute of Water Transportation Engineers)	ul. K. Minina, 7
	*Sel'skokhoziaistvennyi institut (Agricultural Institute)	ul. Minina i Pozharskogo, 7/1
	*Meditsinskii institut (Medical Institute)	pl. Minina i Pozharskogo, 10/1
	*Pedagogicheskii institut inostrannykh iazykov (Pedagogical Institute of Foreign Languages)	ul. K. Minina, 31-a
	*Pedagogicheskii institut (Pedagogical Institute)	ul. Ul'ianova, 1

See footnotes at end of table.

City [2]	Institution	Address
70. Gor'kii—Continued	Gosudarstvennaia konservatoriia (State Conservatory)	ul. Piskunova, 40
	Filial Vsesoiuznogo iuridicheskogo zaochnogo instituta (Affiliate of the All-Union Juridical Correspondence Institute)	ul. Maiakovskogo, 24
	Filial Vsesoiuznogo zaochnogo finansovo-ekonomicheskogo instituta (Affiliate of the All-Union Correspondence Finance-Economics Institute)	ul. Sverdlova, 26
71. Gorlovka, Donetskoi obl., Ukrainskoi SSR	Pedagogicheskii institut inostrannykh iazykov (Pedagogical Institute of Foreign Languages)	ul. Institutskaia, 42
	Obshchetekhnicheskii zaochnyi fakul'tet Donetskogo politekhnicheskogo instituta (General Technical Correspondence Faculty of the Donets Polytechnical Institute)	prosp. Lenina, 5
72. Gorno-Altaisk	Pedagogicheskii institut (Pedagogical Institute)	Sotsialisticheskaia ul., 28
73. Grodno, Belorusskoi SSR	Sel'skokhoziaistvennyi institut (Agricultural Institute)	Akademicheskaia ul., 10
	Pedagogicheskii institut (Pedagogical Institute)	ul. Ozheshko, 22
	Meditsinskii institut (Medical Institute)	ul. Ozheshko, 1
74. Groznyi	*Neftianoi Institut (Petroleum Institute)	pl. Ordzhonikidze, 100
	Checheno-Ingushskii pedagogicheskii institut (Chechenian-Ingushkian Pedagogical Institute)	ul. Mendeleeva, 32
75. Gur'ev, Kazakhskoi SSR	Pedagogicheskii Institut (Pedagogical Institute)	prosp. Lenina, 46

76. Iakutsk	*Gosudarstvennyi universitet (State University)	Oktiabr'skaia ul., 33
77. Iaroslavl'	*Tekhnologicheskii institut (Technological Institute)	Sovetskaia ul., 14
	*Pedagogicheskii institut (Pedagogical Institute)	Respublikanskaia ul., 108
	*Meditsinskii institut (Medical Institute)	Revoliutsionnaia ul., 5
	Filial Vsesoiuznogo zaochnogo finansovo-ekonomicheskogo instituta (Affiliate of the All-Union Correspondence Finance-Economics Institute)	Volzhskaia naberezhnaia ul., 16
78. Ioshkar-Ola, Mariiskoi ASSR	*Povolzhskii lesotekhnicheskii institut (Povolzh Forestry Technical Institute)	Sovetskaia ul., 152
	*Mariiskii pedagogicheskii institut (Mari Pedagogical Institute)	Kommunisticheskaia ul., 94
79. Irkutsk	*Gosudarstvennyi universitet (State University)	Vuzovskaia naberezhnaia, 20
	Politekhnicheskii institut (Polytechnical Institute) *[Graduate training at Mining and Metallurgy Institute, ul. Krasnoi Zvesdy, 5]	ul. Krasnoi Zvesdy, 3
	*Sel'skokhoziaistvennyi institut (Agricultural Institute)	ul. Timiriazeva, 59
	*Finansovo-ekonomicheskii institut (Finance-Economics Institute)	ul. Lenina, 11
	*Meditsinskii institut (Medical Institute)	ul. Krasnogo vosstaniia, 1
	*Pedagogicheskii institut (Pedagogical Institute)	ul. Zheliabova, 2

See footnotes at end of table.

City [2]	Institution	Address
79. Irkutsk—Continued	*Pedagogicheskii institut inostrannykh iazykov (Pedagogical Institute of Foreign Languages)	ul. Lenina, 12
	Filial zaochnogo instituta sovetskoi torgovli (Affiliate of the Correspondence Institute of Soviet Trade)	ul. K. Marksa, 21
80. Ishim, Tiumanskoi obl.	Pedagogicheskii institut (Pedagogical Institute)	
81. Ishimbai, Bashkirskoi ASSR	Vechernee otdelenie Moskovskogo instituta neftekhimicheskoi i gazovoi promyshlennosti (Evening Division of the Moscow Institute of the Petrochemical and Gas Industry)	
82. Iuzhno-Sakhalinsk	Iuzhno-Sakhalinskii pedagogicheskii institut (Iuzhno-Sakhalinsk Pedagogical Institute)	ul. Lenina
83. Ivanovo	*Energeticheskii institut (Power Institute)	Rabfakovskaia ul., 34
	*Khimiko-tekhnologicheskii institut (Chemical-Technological Institute)	ul. F. Engel’sa, 7
	Tekstil’nyi institut (Textile Institute)	ul. F. Engel’sa, 21
	*Meditsinskii institut (Medical Institute)	ul. Lenina, 8
	Sel’skokhoziaistvennyi institut (Agricultural Institute)	ul. Negorelaia, 39/16
	*Pedagogicheskii institut (Pedagogical Institute)	ul. Ermaka, 37
	Filial Vsesoiuznogo iuridicheskogo zaochnogo instituta (Affiliate of the All-Union Juridical Correspondence Institute)	prosp. Lenina, 16
84. Izhevsk, Udmurtskoi ASSR	*Mekhanicheskii institut (Mechanical Institute)	ul. M. Gor’kogo, 79

	Meditsinskii institut (Medical Institute)	Revoliutsionnaia ul., 199
	*Udmurtskii pedagogicheskii institut (Udmurt Pedagogical Institute)	Krasnogeroiskii per., 69
	Sel'skokhoziaistvennyi institut (Agricultural Institute)	ul. Kirova, 16
85. Izmail, Ukrainskoi SSR	Pedagogicheskii institut (Pedagogical Institute)	prosp. Suvorova, 91
86. Kadievka, Luganskoi obl.	Vechernee otdelenie i obshchetekhnicheskii zaochnyi fakul'tet Khar'kovskogo gornogo instituta (Evening Division and General Technical Correspondence Faculty of the Kharkov Mining Institute)	ul. Lenina, 24
87. Kalinin	*Torfianoi institut (Peat Institute)	prosp. Lenina, 25
	*Meditsinskii institut (Medical Institute)	Sovetskaia ul., 4
	*Pedagogicheskii institut (Pedagogical Institute)	ul. Uritskogo, 16/31
88. Kaliningrad, oblastnoi	*Tekhnicheskii institut rybnoi promyshlennosti i khoziaistva (Technical Institute of the Fishing Industry and Economy)	prosp. Mira, 2
	Pedagogicheskii institut (Pedagogical Institute)	ul. Chernyshevskogo, 56
89. Kaluga	Pedagogicheskii institut (Pedagogical Institute)	
	Vechernii fakul'tet Moskovskogo vysshego tekhnicheskogo uchilishcha im. N. E. Baumana (Evening Faculty of the Moscow N. E. Bauman Higher Technical School)	
90. Kamenets-Podol'skii, Ukrainskoi SSR	Sel'skokhoziaistvennyi institut (Agricultural Institute)	ul. Shevchenko, 19

See footnotes at end of table.

City [2]	Institution	Address
90. Kamenets-Podol'skii, Ukrainskoi SSR—Con.	Pedagogicheskii institut (Pedagogical institute)	ul. K. Marksa, 10
91. Karachaevsk, Karachaevo-Cherkesskoi avt. obl.	Karachaevo-Cherkesskii pedagogicheskii institut (Karachaevsk-Cherkessk Pedagogical Institute)	ul. Lenina, 4
92. Karaganda, Kazakhskoi SSR	*Politekhnicheskii institut (Polytechnical Institute)	bul'var Mira, 22
	*Meditsinskii Institut (Medical Institute)	ul. Kirova, 18
	Pedagogicheskii institut (Pedagogical Institute)	ul. Kirova, 16
93. Karshi, Uzbekskoi SSR	Pedagogicheskii institut (Pedagogical Institute)	ul. Kuchabag, 17
94. Kaunas, Litovskoi SSR	*Politekhnicheskii Institut (Polytechnical Institute)	ul. Donelaicho, 73
	*Litovskaia sel'skokhoziaistvennaia akademiia (Lithuanian Agricultural Academy)	ul. Kestuchio, 27
	Meditsinskii institut (Medical Institute)	ul. Mitskevichaus, 9
	Litovskaia veterinarnaia akademiia (Lithuanian Veterinary Academy)	ul. Til'zhes, 18
	Litovskii institut fizicheskoi kul'tury (Lithuanian Institute of Physical Culture)	ul. Sporta, 10
95. Kazan'	*Gosudarstvennyi universitet (State University)	ul. Lenina, 18
	*Aviatsionnyi institut (Aviation Institute)	ul. Karla Marksa, 10
	*Khimiko-tekhnologicheskii institut (Chemical-Technological Institute)	ul. Karla Marksa, 68

96. Kemerovo, oblastnoi RSFSR	Sel'skokhoziaistvennyi institut (Agricultural Institute)	ul. Karla Marksa, 65
	Finansovo-ekonomicheskii institut (Finance-Economics Institute)	ul. Butlerova, 4
	*Meditsinskii institut (Medical Institute)	ul. Butlerova, 49
	*Inzhenerno-stroitel'nyi institut (Engineering Construction Institute)	Zelenaia ul., 1
	Gosudarstvennaia konservatoria (State Conservatory)	Pushkinskaia ul., 1
	*Pedagogicheskii institut (Pedagogical Institute)	Levo-Bulachnaia ul., 44
	Filial zaochnogo instituta sovetskoi torgovli (Affiliate of the Correspondence Institute of Soviet Trade)	ul. Butlerova, 4
	*Gornyi institut (Mining Institute)	Vecherniaia, 28
	Pedagogicheskii institut (Pedagogical Institute)	pos. Standart
	Meditsinskii institut (Medical Institute)	ul. 40 let Oktiabria, 6
	Filial Vsesoiuznogo zaochnogo finansovo-ekonomicheskogo instituta (Affiliate of the All-Union Correspondence Finance-Economics Institute)	ul. Cherniakhovskogo, 2
97. Kerch' Ukrainskoi SSR	Obshchetekhnicheskii zaochnyi fakul'tet Odesskogo tekhnologicheskogo instituta im. M. V. Lomonosova (General Technical Correspondence Faculty of the Odessa M. V. Lomonosov Technological Institute)	pos. Arshinskogo
98. Khabarovsk	Avtomobil'no-dorozhnyi institut (Automobile-Highway Institute)	Tikhookeanskoe shosse, 154
	*Institut inzhenerov zheleznodorozhnogo transporta (Institute of Railway Transportation Engineers)	Nekrasovskaia ul., 128

See footnotes at end of table.

City [2]	Institution	Address
98. Khabarovsk—Continued	*Meditsinskii institut (Medical Institute)	ul. Karla Marksa, 32
	*Pedagogicheskii institut (Pedagogical Institute)	ul. Karla Marksa, 64
	Fakul'tet Vsesoiuznogo iuridicheskogo zaochnogo instituta (Faculty of the All-Union Juridical Correspondence Institute)	Vokzal'naia ul., 93/2
	Filial Vsesoiuznogo zaochnogo finansovo-ekonomicheskogo instituta (Affiliate of the All-Union Correspondence Finance-Economics Institute)	ul. K. Marksa, 69
	Filial zaochnogo instituta sovetskoi torgovli (Affiliate of the Correspondence Institute of Soviet Trade)	ul. Serysheva, 47
99. Khar'kov, Ukrainskoi SSR	*Gosudarstvennyi universitet (State University)	Universitetskaia ul., 16
	*Politekhnicheskii institut (Polytechnical Institute)	ul. Frunze, 21
	*Inzhenerno-stroitel'nyi institut (Engineering Construction Institute)	Sumskaia ul., 40
	*Gornyi institut (Mining Institute)	prosp. Lenina, 14
	*Aviatsionnyi institut (Aviation Institute)	ul. Pomerki, 27
	*Institut inzhenerov zheleznodorozhnogo transporta (Institute of Railway Transportation Engineers)	pl. Feierbakha, 7
	*Inzhenerno-ekonomicheskii institut (Engineering Economics Institute)	prosp. Lenina, 9
	Institut inzhenerov kommunal'nogo stroitel'stva (Institute of Communal Construction Engineers)	ul. Revoliutsii, 12

	*Sel'skokhoziaistvennyi institut (Agricultural Institute)	ul. Artema, 44
	Institut mekhanizatsii sel'skogo khoziaistva (Institute of the Mechanization of Agriculture)	Moskovskii prospekt, 45
	Zooveterinarnyi institut (Zooveterinary Institute)	pos. Dergachi, Khar'kovskoi obl.
	*Avtomobil'no-dorozhnyi institut (Automobile-Highway Institute)	ul. Petrovskogo, 25
	*Iuridicheskii institut (Juridical Institute)	Pushkinskaia ul., 77
	*Meditsinskii institut (Medical Institute)	prosp. Lenina, 4
	*Meditsinskii stomatologicheskii institut (Medical Stomatological Institute)	Pushkinskaia ul., 53
	*Farmatsevticheskii institut (Pharmaceutical Institute)	ul. Mel'nikova, 12
	Pedagogicheskii institut fizicheskogo vospitaniia (Pedagogical Institute of Physical Education)	ul. Artema, 29
	Gosudarstvennaia konservatoriia (State Conservatory)	pl. Teveleva, 13
	Gosudarstvennyi teatral'nyi institut (State Theatrical Institute)	Sumskaia ul., 34
	Gosudarstvennyi khudozhestvennyi institut (State Art Institute)	Krasnoznamennaia ul., 8
	Bibliotechnyi Institut (Library Institute)	Bursatskii spusk, 4
	Ukrainskii zaochnyi politekhnicheskii institut (Ukrainian Correspondence Polytechnical Institute)	Universitetskaia ul., 16
100. Kherson	Sel'skokhoziaistvennyi institut (Agricultural Institute)	Aleksandrovskaia pl., 2
	Pedagogicheskii institut (Pedagogical Institute)	ul. Pestelia, 3

See footnotes at end of table.

City[2]	Institution	Address
100. Kherson—Continued	Filial Odesskogo tekhnologicheskogo instituta im. M. V. Lomonosova c dnevnym i vechernim otdeleniiami i obshchetekhnicheskim zaochnym fakul'tetom (Affiliate of the M. V. Lomonosov Odessa Technological Institute with day and evening divisions and a general technical correspondence faculty)	Boreslavskoe shosse, 24
101. Kiev, Ukrainskoi SSR	*Gosudarstvennyi universitet (State University)	Vladimirskaia ul., 64
	*Politekhnicheskii institut (Polytechnical Institute)	Brest-Litovskoe shosse, 39
	*Inzhenerno-stroitel'nyi institut (Engineering Construction Institute)	bul'var Tarasa Shevchenko, 86
	*Tekhnologicheskii institut legkoi promyshlennosti (Technological Institute of Light Industy)	ul. Nemirovicha-Danchenko, 2
	*Avtomobil'no-dorozhnyi institut (Automobile-Highway Institute)	ul. Suvorova, 1
	*Institut grazhdanskogo vozdushnogo flota (Institute of the Civil Air Fleet)	ul. Borshchagovskogo, 197
	Ukrainskaia sel'skokhoziaistvennaia akademiia (Ukrainian Agricultural Academy)	Goloseevo
	*Tekhnologicheskii institut pishchevoi promyshlennosti (Technological Institute of the Food Industry)	Vladimirskaia ul., 68
	*Meditsinskii institut (Medical Institute)	bul'var Tarasa Shevchenko, 13
	Institut narodnogo khoziaistva (Institute of National Economy)	Brest-Litovskoe shosse, 116-a
	*Gosudarstvennaia konservatoriia (State Conservatory)	ul. Karla Marksa, 1/3

	*Pedagogicheskii institut (Pedagogical Institute)	bul'var Tarasa Shevchenko 22/24
	Pedagogicheskii institut inostrannykh iazykov (Pedagogical Institute of Foreign Languages)	Krasnoarmeiskaia, ul. 73
	Gosudarstvennyi institut teatral'nogo iskusstva (State Institute of Theatrical Arts)	Kreshchatik, 52
	Gosudarstvennyi khudozhestvennyi institut (State Art Institute)	ul. Smirnova-Lastochkina, 20
	Institut fizicheskoi kul'tury (Institute of Physical Culture)	Fizkul'turnaia ul., 1
	Vechernii fakul'tet Ukrainskogo poligraficheskogo instituta (Evening Faculty of the Ukrainian Polygraphic Institute)	Vladimirskaia ul., 1
102. Kinel' Kuibyshevskoi obl.	*Kuibyshevskii sel'skokhoziaistvennyi institut (Kuibyshev Agricultural Institute)	pos. Sovety
103. Kirov, oblastnoi	Sel'skokhoziaistvennyi institut (Agricultural Institute)	Oktiabr'skaia ul., 73
	*Pedagogicheskii institut (Pedagogical Institute)	ul. Lenina, 111
	Filial i obshchetekhnicheskii zaochnyi fakul'tet Vsesoiuznogo zaochnogo energeticheskogo instituta (Affiliate and General-Technical Correspondence Faculty of the All-Union Correspondence Power Institute)	ul. Kommuny, 39
	Filial Vsesoiuznogo zaochnogo instituta tekstil'noi i legkoi promyshlennosti (Affiliate of the All-Union Correspondence Institute of Textile and Light Industry)	ul. Lenina, 99
104. Kirovabad, Azerbaidzhanskoi SSR	*Azerbaidzhanskii sel'skokhoziaistvennyi institut (Azerbaidzhan Agricultural Institute)	ul. Azizbekova, 222
	Pedagogicheskii institut (Pedagogical Institute)	ul. 28 Aprelia, 25

See footnotes at end of table.

City [2]	Institution	Address
105. Kirovakan, Armianskoi SSR	Vechernii i zaochnyi filialy Erevanskogo politekhnicheskogo instituta (Evening and Correspondence Affiliate of the Erevan Polytechnical Institute)	
106. Kirovograd, Ukrainskoi SSR	Pedagogicheskii institut (Pedagogical Institute)	ul. Shevchenko, 1
	Vechernee otdelenie i obshchetekhnicheskii zaochnyi fakul'tet Khar'kovskogo politekhnicheskogo instituta (Evening Division and General Technical Correspondence Faculty of the Kharkov Polytechnical Institute)	ul. Frunze, 6
107. Kirovsk, Murmanskoi obl.	Vechernii fakul'tet Leningradskogo gornogo instituta (Evening Faculty of the Leningrad Mining Institute)	
108. Kishinev, Moldavskoi SSR	*Gosudarstvennyi universitet (State University)	ul. Pirogova, 65
	*Sel'skokhoziaistvennyi institut (Agricultural Institute)	Sadovaia ul., 121
	*Meditsinskii institut (Medical Institute)	prosp. Lenina, 165
	Gosudarstvennaia konservatoriia (State Conservatory)	ul. Pirogova, 39
	Filial Zaochnogo instituta sovetskoi torgovli (Affiliate of the Correspondence Institute of Soviet Trade)	Pavlovskaia ul., 18
	Filial Vsesoiuznogo zaochnogo instituta pishchevoi promyshlennosti (Affiliate of the All-Union Correspondence Institute of the Food Industry)	ul. Pushkina, 6
109. Klaipeda, Litovskoi SSR	Vechernee otdelenie Kaunasskogo politekhnicheskogo instituta (Evening Division of the Kaunas Polytechnical Institute)	

110. Kokand, Uzbekskoi SSR	Pedagogicheskii institut (Pedagogical Institute)	ul. Karla Marksa, 63
111. Kolomna, Moskovskoi obl.	Pedagogicheskii institut (Pedagogical Institute)	ul. Zaitseva, 26
	Filial Moskovskogo vechernego mashinostroitel'nogo instituta (Affiliate of the Moscow Evening Machine Construction Institute)	Shosseinaia ul., 2
112. Kommunarsk, Luganskoi obl.	Gorno-metallurgicheskii institut (Mining-Metallurgy Institute)	prosp. Mira, 48
113. Komsomol'skna-Amure, Khabarovskogo kraia	Pedagogicheskii institut (Pedagogical Institute)	Pionerskaia ul., 18
	Vechernii politekhnicheskii institut (Evening Polytechnical Institute)	prosp. Lenina, 27
114. Konotop, Sumskoi obl., Ukrainskoi SSR	Obshchetekhnicheskii zaochnyi fakul'tet Khar'kovskogo gornogo instituta (General-Technical Correspondence Faculty of the Kharkov Mining Institute)	Pionerskaia ul., 9–b
115. Konstantinovka, Donetskoi obl., Ukrainskoi SSR	Obshchetekhnicheskii zaochnyi fakul'tet Ukrainskogo zaochnogo politekhnicheskogo instituta (General-Technical Correspondence Faculty of the Ukrainian Correspondence Polytechnical Institute)	
116. Kopeisk, Cheliabinskoi obl.	Vechernee otdelenie Cheliabinskogo politekhnicheskogo instituta (Evening Division of the Cheliabinsk Polytechnical Institute)	
117. Kostroma	*Tekstil'nyi institut (Textile Institute)	ul. Dzerzhinskogo, 17
	Pedagogicheskii institut (Pedagogical Institute)	Piatnitskaia ul., 2/18
	Sel'skokhoziaistvennyi institut (Agricultural Institute)	ul. 1 Maia, 14
118. Kotlas, Arkhangel'skoi obl.	Vechernee otdelenie Arkhangel'skogo lesotekhnicheskogo instituta (Evening Division of the Archangel Forestry Technical Institute)	

See footnotes at end of table.

City[2]	Institution	Address
119. Kramatorsk, Ukrainskoi SSR	Vechernii industrial'nyi institut (Evening Industrial Institute)	ul. Maiakovskogo, 21
120. Krasnodar	*Institut pishchevoi promyshlennosti (Institute of the Food Industry)	ul. Krasnaia, 135
	*Kubanskii meditsinskii institut (Kuban Medical Institute)	ul. Sedina, 4
	*Pedagogicheskii institut (Pedagogical Institute)	ul. Sedina, 4
	Kubanskii sel'skokhoziaistvennyi institut (Kuban Agricultural Institute)	ul. Druzhby, 107
	Filial Vsesoiuznogo zaochnogo inzhenerno-stroitel'nogo instituta (Affiliate of the All-Union Correspondence Engineering Construction Institute)	Krasnaia ul., 170
	Fakul'tet Vsesoiuznogo iuridicheskogo zaochnogo instituta (Faculty of the All-Union Juridical Correspondence Institute)	Krasnaia ul., 59
121. Kransoiarsk	Politekhnicheskii institut (Polytechnical Institute)	Prosp. Mira, 49
	*Institut tsvetnykh metallov (Institute of Non-Ferrous Metals)	Vuzovskii per. 3
	*Sibirskii tekhnologicheskii institut (Sibirsk Technological Institute)	Krasnoiarskii prosp., 82
	Sel'skokhoziaistvennyi institut (Agricultural Institute)	Krasnoiarskii prosp., 88
	*Pedagogicheskii institut (Pedagogical Institute)	Krasnoiarskii prosp., 83
	*Meditsinskii institut (Medical Institute)	ul. Karla Marksa, 124

	Filial Vsesoiuznogo zaochnogo instituta pishchevoi promyshlennosti (Affiliate of the All-Union Correspondence Institute of the Food Industry)	ul. Lomonosova, 54
122. Krasnovodsk, Turkmenskoi SSR	Zaochnoe otdelenie Moskovskogo instituta neftekhimicheskoi i gazovoi promyshlennosti (Correspondence Division of the Moscow Institute of the Petrochemical and Gas Industry)	
123. Kremechug, Ukrainskoi SSR	Obshchetekhnicheskii zaochnyi fakul'tet Poltavskogo inzhenerno-stroitel'nogo instituta (General Technical Correspondence Faculty of the Poltava Engineering Construction Institute)	Kolkhoznaia ul., 14
124. Krements, Ukrainskoi SSR	Pedagogicheskii institut (Pedagogical Institute)	ul. Krupskoi, 2
125. Krivoi Rog, Ukrainskoi SSR	*Gornorudnyi institut (Mining Institute)	Pushkinskaia ul., 37
	Pedagogicheskii institut (Pedagogical Institute)	pl. Mira, 2
126. Kuibyshev, oblastnoi	*Industrial'nyi institut (Industrial Institute)	ul. Kuibysheva, 153
	*Aviatsionnyi institut (Aviation Institute)	Molodogvardeiskaia ul., 151
	*Inzhenerno-stroitel'nyi institut (Engineering Construction Institute)	Molodogvardeiskaia ul., 194
	*Meditsinskii institut (Medical Institute)	Chapaevskaia ul., 89
	Planovyi institut (Planning Institute)	Molodogvardeiskaia ul., 194
	*Pedagogicheskii institut (Pedagogical Institute)	ul. M. Gor'kogo, 65/67
	Fakul'tet Vsesoiuznogo iuridicheskogo zaochnogo instituta (Faculty of the All-Union Juridical Correspondence Institute)	pl. Revoliutsii, 60

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City[2]	Institution	Address
126. Kuibyshev, oblastnoi—Con.	Elektrotekhnicheskii institut sviazi (Electrotechnical Communications Institute)	ul. L'va Tolstogo, 23
	Filial Zaochnogo instituta sovetskoi torgovli (Affiliate of the Correspondence Institute of Soviet Trade)	Sadovaia ul., 26
127. Kuliab, Tadzhikskoi SSR	Pedagogicheskii institut (Pedagogical Institute)	ul. Karla Marksa, 2
128. Kurgan, oblastnoi	Mashinostroitel'nyi institut (Machine Construction Institute)	ploshchad' im. Lenina
	Sel'skokhoziaistvennyi institut (Agricultural Institute)	ul. Kuibysheva, 55
	Pedagogicheskii institut (Pedagogical Institute)	Sovetskaia ul., 63
129. Kursk	*Meditsinskii institut (Medical Institute)	ul. Karla Marksa, 3
	Pedagogicheskii institut (Pedagogical Institute)	ul. Radishcheva, 33
	Sel'skokhoziaistvennyi institut (Agricultural Institute)	ul. Karla Marksa, 74
	Filial Vsesoiuznogo zaochnogo finansovo-ekonomicheskogo instituta (Affiliate of the All-Union Correspondence Finance-Economics Institute)	Krasnaia ploshchad', 6
130. Kustanai, Kazakhskoi SSR	Pedagogicheskii institut (Pedagogical Institute)	ul. Tarana, 113
131. Kutaisi, Gruzinskoi SSR	Pedagogicheskii institut (Pedagogical Institute)	ul. Kirova, 55
132. Kyzyl, Tuvinskoi ASSR	Pedagogicheskii institut (Pedagogical Institute)	ul. Lenina, 4

133. Kzyl-Orda, Kazakhskoi SSR	Pedagogicheskii institut (Pedagogical Institute)	ul. 25-letiia VLKSM, 8
134. Leninabad, Tadzhikskoi SSR	Pedagogicheskii institut (Pedagogical Institute)	ul. Ordzhonikidze, 158
135. Leninakan, Armianskoi SSR	Filial Erevanskogo politekhnicheskogo instituta (Affiliate of the Erevan Polytechnical Institute)	
136. Leningrad	*Gosudarstvennyi universitet (State University)	Universitetskaia naberezhnaia, 7/9
	*Politekhnicheskii institut (Polytechnical Institute)	Politekhnicheskaia ul., 3
	*Gornyi institut (Mining Institute)	Vasil'evskii Ostrov, 21-ia liniia, 2
	*Tekhnologicheskii institut im. Lensoveta (Lensovet Technological Institute)	Moskovskii pr. 26
	Zavod-vtuz pri Leningradskom metallicheskom zavode (Plant-Higher Technical Educational Institution attached to the Leningrad Metal Plant)	
	*Elektrotekhnicheskii institut (Electrotechnical Institute)	ul. prof. Popova, 5
	*Institut aviatsionnogo priborostroeniia (Institute of the Aviation Industry)	ul. Gertsena, 67
	*Inzhenerno-stroitel'nyi institut (Engineering Construction Institute)	Moskovskii prospekt, 29
	Mekhanicheskii institut (Mechanical Institute)	1–ia Krasnoarmeiskaia ul.,1/21
	*Institut tochnoi mekhaniki i optiki (Institute of Precision Mechanics and Optics)	per. Grivtsova, 14
	*Korablestroitel'nyi institut (Shipbuilding Institute)	Lotsmanskaia ul., 3
	*Tekstil'nyi institut (Textile Institute)	ul. Gertsena, 18

See footnotes at end of table.

City[3]	Institution	Address
136. Leningrad—Con.	*Lesotekhnicheskaia akademiia (Forestry Technical Academy)	Institutskii per., 5
	*Institut inzhenerov zheleznodorozhnogo transporta (Institute of Railway Transportation Engineers)	Moskovskii prosp., 9
	*Institut inzhenerov vodnogo transporta (Institute of Water Transportation Engineers)	Dvinskaia ul., 5/7
	*Vysshee inzhenernoe morskoe uchilishche im admirala S. O. Makarova (Admiral S. O. Makarov Higher Marine Engineering Educational Establishment)	Vasil'evskii Ostrov, Kosaia liniia, 15–a
	*Gidrometeorologicheskii institut (Hydrometeorological Institute)	Malo-Okhtinskii prosp., 98
	*Elektrotekhnicheskii institut sviazi (Electrotechnical Communications Institute)	Naberezhnaia reki Moiki, 61
	*Tekhnologicheskii institut tselliulozno-bumazhnoi promyshlennosti (Technological Institute of the Cellulose Paper Industry)	Novosivkovskaia ul., 4
	*Tekhnologicheskii institut kholodil'noi promyshlennosti (Technological Institute of the Refrigeration Industry)	ul. Lomonosova, 9
	*Severo-Zapadnyi zaochnyi politekhnicheskii institut (Northwest Correspondence Polytechnical Institute)	ul. Khalturina, 5
	Veterinarnyi institut (Veterinary Institute)	Chernigovskaia ul., 5
	*Inzhenerno-ekonomicheskii institut (Engineering-Economics Institute)	ul. Marata, 27
	*Institut sovetskoi torgovli (Institute of Soviet Trade)	Kuznechnyi per., 9
	*Finansovo-ekonomicheskii institut (Finance-Economics Institute)	kanal Griboedova, 30/32

	*1-i Meditsinskii institut (1st Medical Institute)	ul. L'va Tolstogo, 6/8
	Sanitarno-gigienicheskii institut (Sanitary-Hygiene Institute)	ul. Kurakina, 1/3
	*Meditsinskii pediatricheskii institut (Medical Pediatrics Institute)	Ligovskaia ul., 2
	*Khimiko-farmatsevticheskii institut (Chemical-Pharmaceutical Institute)	ul. Popova, 14
	*Pedagogicheskii institut im. Gertsena (Gertsen Pedagogical Institute)	Naberezhnaia Moiki, 48
	*Gosudarstvennyi bibliotechnyi institut (State Library Institute)	Dvortsovaia naberezhnaia, 4
	*Institut kinoinzhenerov (Institute of Motion-Picture Engineers)	ul. Pravdy, 13
	*Gosudarstvennaia konservatoriia (State Conservatory)	Teatral'naia pl., 3
	*Gosudarstvennyi teatral'nyi institut (State Theatrical Institute)	Mokhovaia ul., 34
	*Institut zhivopisi, skul'ptury i arkhitektury (Institute of Art, Sculpture, and Architecture)	Universitetskaia naberezhnaia, 17
	Vysshee khudozhestvennoe promyshlennoe uchilishche im. V. I. Mukhinoi (V. I. Mukhinoi Higher Art Industrial School)	Solianoi per., 13
	*Gosudarstvennyi institut fizicheskoi kul'tury (State Institute of Physical Culture)	ul. Dekabristov, 35
	Vsesoiuznyi zaochnyi lesotekhnicheskii institut (All-Union Correspondence Forestry-Technical Institute)	Institutskii per., 3
137. Leninogorsk, Tatarskoi ASSR	Vechernee otdelenie Moskovskogo instituta neftekhimicheskoi i gazovoi promyshlennosti (Evening Division of the Moscow Institute of the Petrochemical and Gas Industry)	

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City[2]	Institution	Address
138. Liepaia, Latviiskoi SSR	Pedagogicheskii institut (Pedagogical Institute)	ul. Lenina, 14
139. Likino, Moskovskoi obl.	Vechernee otdelenie Moskovskogo lesotekhnicheskogo instituta (Evening Division of the Moscow Forestry Technical Institute)	
140. Lipetsk, oblastnoi	Pedagogicheskii institut (Pedagogical Institute)	ul. Ushinskogo, 8
	Vechernii fakul'tet Moskovskogo instituta stali (Evening Faculty of the Moscow Steel Institute)	
141. Liubertsy, Moskovskoi obl.	Vechernii fakul'tet Vsesoiuznogo zaochnogo inzhenerno-stroitel'nogo instituta (Evening Faculty of the All-Union Correspondence Engineering Construction Institute)	
142. Lugansk, oblastnoi, Ukrainskoi SSR	Vechernii mashinostroitel'nyi institut (Evening Machine Construction Institute)	ul. Frunze, 112
	Sel'skokhoziaistvennyi institut (Agricultural Institute)	Opytnoe Pole
	Gosudarstvennyi meditsinskii institut (State Medical Institute)	Oboronnaia ul., 1
	Pedagogicheskii institut (Pedagogical Institute)	Novosvetlovskaia ul., 1
143. Lutsk, Volynskoi obl., Ukrainskoi SSR	Pedagogicheskii institut (Pedagogical Institute)	ul. Krasnoi Armii, 60
144. L'vov, Ukrainskoi SSR	*Gosudarstvennyi universitet (State University)	Universitetskaia ul., 1
	*Politekhnicheskii institut (Polytechnical Institute)	ul. Mira, 12
	Ukrainskii poligraficheskii institut (Ukrainian Polygraphic Institute)	Podval'naia ul., 17

	Lesotekhnicheskii institut (Forestry Technical Institute)	Pushkinskaia ul., 103
	*Meditsinskii institut (Medical Institute)	Pekarskaia ul., 71
	*Torgovo-ekonomicheskii institut (Trade Economics Institute)	ul. Chkalova, 10
	Zooveterinarnyi institut (Zooveterinary Institute)	ul. Maiakovskogo, 67
	Gosudarstvennaia konservatoriia (State Conservatory)	ul. Chaikovskogo, 7
	Gosudarstvennyi institut prikladnogo i dekorativnogo iskusstva (State Institute of Applied and Decorative Art)	Snopkovskaia ul., 47
	Institut fizicheskoi kul'tury (Institute of Physical Culture)	ul. Kostiushko, 11
145. Magadan	Filial Vsesoiuznogo zaochnogo politekhnicheskogo instituta (Affiliate of the All-Union Correspondence Polytechnical Institute)	ul. Lenina, 4
	Pedagogicheskii institut (Pedagogical Institute)	ul. Kommuny, 30
146. Magnitogorsk	*Gornometallurgicheskii institut (Mining-Metallurgy Institute)	prosp. Lenina, 38
	Pedagogicheskii institut (Pedagogical Institute)	prosp. Pushkina, 21
147. Maikop	Adygeiskii pedagogicheskii institut (Adygei Pedagogical Institute)	Sovetskaia ul., 183
148. Makeevka, Ukrainskoi SSR	Vechernii filial Donetskogo politekhnicheskogo instituta (Evening Affiliate of the Donets Polytechnical Institute)	Sovetskaia Koloniia, pl. VLKSM
149. Makhachkala	Dagestanskii gosudarstvennyi universitet (Dagestan State University)	ul. Dzerzhinskogo, 12
	Dagestanskii sel'skokhoziaistvennyi institut (Dagestan Agricultural Institute)	ul. M. Gadzhieva
	Dagestanskii meditsinskii institut (Dagestan Medical Institute)	pl. im. Lenina

See footnotes at end of table.

City[2]	Institution	Address
149. Makhachkala—Con.	Dagestanskii zhenskii pedagogicheskii institut (Dagestan Pedagogical Institute for Women)	ul. im. 26 Bakinskikh komissarov, 43
150. Marganets, Ukrainskoi SSR	Vechernee otdelenie Krivorozhskogo gornorudnogo instituta (Evening Division of the Krivoi-Rog Mining Institute)	ul. Sovetskaia, 41
151. Melekess, Ul'ianovskoi obl.	Pedagogicheskii institut (Pedagogical Institute)	ul. Dzerzhinskogo, 27
152. Melitopol', Zaporozkskoi obl., Ukrainskoi SSR	Institut mekhanizatsii sel'skogo khoziaistva (Institute of the Mechanization of Agriculture)	prosp. B. Khmel'nitskogo, 18
	Pedagogicheskii institut (Pedagogical Institute)	ul. Lenina, 10
153. Miass, Cheliabinskoi obl.	Vechernii fakul'tet Cheliabinskogo politekhnicheskogo instituta (Evening Faculty of the Cheliabinsk Polytechnical Institute)	
154. Michurinsk	Plodoovoshchnoi institut (Fruit and Vegetable Institute)	pl. 25 Oktiabria, 3
	Pedagogicheskii institut (Pedagogical Institute)	Sovetskaia ul., 274
155. Minsk, Belorusskoi SSR	Belorusskii gosudarstvennyi universitet (Belorussian State University)	Universitetskii gorodok
	Belorusskii politekhnicheskii institut (Belorussian Polytechnical Institute)	Leninskii prosp., 93
	Belorusskii institut mekhanizatsii sel'skogo khoziaistva (Belorussian Institute of the Mechanization of Agriculture)	Leninskii prosp., 141
	Belorusskii tekhnologicheskii institut (Belorussian Technological Institute)	ul. Sverdlova, 13
	Belorusskii institut narodnogo khoziaistva (Belorussian Institute of National Economy)	ul. Sverdlova, 3
	Meditsinskii institut (Medical Institute)	Leninskii prosp., 7

	Pedagogicheskii institut (Pedagogical Institute)	Sovetskaia ul., 18
	Pedagogicheskii institut inostrannykh iazykov (Pedagogical Institute of Foreign Languages)	ul. Zakharova, 21
	Belorusskaia gosudarstvennaia konservatoriia (Belorussian State Conservatory)	pl. Svobody, 7
	Belorusskii gosudarstvennyi teatral'nokhudozhestvennyi institut (Belorussian State Theatrical Arts Institute)	Leninskii prosp., 107
	Belorusskii institut fizicheskoi kul'tury (Belorussian Institute of Physical Culture)	Leninskii prosp., 59–a
156. Mogilev, Belorusskoi SSR	Pedagogicheskii institut (Pedagogical Institute)	ul. Leninskaia, 35
	Mashinostroitel'nyi institut (Machine Building Institute)	ul. Lenina, 70
157. Monchegorsk, Murmanskoi obl.	Vechernii fakul'tet Leningradskogo gornogo instituta (Evening Faculty of the Leningrad Mining Institute)	
158. Moskva (Moscow)	*Gosudarstvennyi universitet (State University)	Leninskii gory
	*Vysshee tekhnicheskoe uchilishche (Higher Technical School)	2-ia Baumanskaia ul., 5
	*Energeticheskii institut (Power Institute)	Krasnokazarmennaia ul., 17
	*Fiziko-tekhnicheskii institut (Physics-Technical Institute)	Moskovskaia obl., g. Dolgoprudnyi
	*Gornyi institut (Mining Institute)	Leninskii prosp., 6
	*Geologorazvedochnyi institut (Geological Survey Institute)	prosp. K. Marksa, 22, korpus Zh.
	*Institut neftekhimicheskoi i gazovoi promyshlennosti (Institute of the Petrochemical and Gas Industry)	Leninskii prosp., 65
	*Institut stali (Steel Institute)	Leninskii prosp., 6

See footnotes at end of table.

City[2]	Institution	Address
158. Moskva (Moscow)—Con.	*Vechernii metallurgicheskii institut (Evening Metallurgical Institute)	2-i Prolomnyi pr., 1
	*Avtomekhanicheskii institut (Automechanics Institute)	B. Semenovskaia ul., 38
	*Inzhenerno-fizicheskii institut (Engineering-Physics Institute)	ul. Kirova, 21
	*Stanko-instrumental'nyi institut (Machine Instruments Institute)	Novoslobodskaia ul., Vadkovskii per., 3-a
	*Institut khimicheskogo mashinostroeniia (Chemical Machine Construction Institute)	ul. Karla Marksa, 21/4
	*Vechernii mashinostroitel'nyi institut (Evening Machine Construction Institute)	Vuzovskii per., 2
	*Aviatsionnyi institut (Aviation Institute)	Volokolamskoe shosse, 8
	*Aviatsionnyi tekhnologicheskii institut (Aviation Technological Institute)	Petrovka, 27
	*Inzhenerno-stroitel'nyi institut (Engineering Construction Institute)	Shliuzovaia nab., 8
	*Avtomobil'no-dorozhnyi institut (Automobile-Highway Institute)	Leningradskii prosp., 64
	*Arkhitekturnyi institut (Architectural Institute)	ul. Zhdanova, 11
	*Poligraficheskii institut (Polygraphic Institute)	ul. Prianishnikova, 2-a
	*Institut inzhenerov zheleznodorozhnogo transporta (Institute of Railway Transportation Engineers)	ul. Obraztsova, 15
	*Elektrotekhnicheskii institut sviazi (Electrotechnical Communications Institute)	Aviamotornaia ul., 8

*Khimiko-tekhnologicheskii institut im. D. I. Mendeleeva (D. I. Mendeleev Chemical Technological Institute)	Miusskaia pl., 9
*Institut tonkoi khimicheskoi tekhnologii (Institute of Fine Chemical Technology)	M. Pirogovskaia ul., 1
*Tekstil'nyi institut (Textile Institute)	Donskaia ul., 62
*Tekhnologicheskii institut legkoi promyshlennosti (Technological Institute of Light Industry)	ul. Poliny Osipenko, 33
*Tekhnologicheskii institut miasnoi i molochnoi promyshlennosti (Technological Institute of the Meat and Milk Industry)	ul. Talalikhina, 33
*Tekhnologicheskii institut pishchevoi promyshlennosti (Technological Institute of the Food Industry)	Volokolamskoe shosse, 11
Tekhnologicheskii institut mestnoi promyshlennosti (Technological Institute of Local Industry)	Moskovskaia obl., st. Tarasovskaia, pos. Cherkisovo, ul. glavnaia, 99
*Lesotekhnicheskii institut (Forestry Technical Institute)	Mytishchi, Moskovskoi obl., pos. Stroitel'
*Sel'skokhoziaistvennaia akademiia (Agricultural Academy)	Novoe shosse, 51
*Institut inzhenerov zemleustroistva (Institute of Land Construction Engineers)	ul. Kazakova, 15
*Institut inzhenerov geodezii, aerofotos"emki i kartograni (Institute of Geodosy, Aerophotography, and Cartography)	Gorokhovskii per., 4
*Veterinarnaia akademiia (Veterinary Academy)	Moskva, Kuz'minki, Zhdanovskogo raiona
*Inzhenerno-ekonomicheskii institut (Engineering-Economics Institute)	Podsosenskii per., 20
*Institut narodnogo khoziaistva (Institute of National Economy)	Stremiannyi per., 28
*Ekonomiko-statisticheskii institut (Economic-Statistical Institute)	B. Savinskii per., 14

See footnotes at end of table.

City[2]	Institution	Address
158. Moskva (Moscow)—Con.	*Finansovyi institut (Finance Institute)	1-ia Iaroslavskaia ul., 3
	Kooperativnyi institut (Cooperative Institute)	st. Perlovskaia, Moskovskoi obl., 2-ia Vokzal'naia ul., 12
	*Istoriko-arkhivnyi institut (Historical Archives Institute)	ul. 25 Oktiabria, 15
	*Gosudarstvennyi bibliotechnyi institut (State Library Institute)	Moskovskaia obl., platf. Levoberezhnaia, Oktiabr'skoi zh. d
	*1-i Gosudarstvennyi pedagogicheskii institut inostrannykh iazykov (First State Pedagogical Institute of Foreign Languages)	Metrostroevskaia ul., 38
	*Gosudarstvennyi pedagogicheskii institut (State Pedagogical Institute)	M. Pirogovskaia, 1
	*Oblastnoi pedagogicheskii institut (Regional Pedagogical Institute)	ul. Radio, 10-a
	*1-i Meditsinskii institut (First Medical Institute)	B. Pirogovskaia ul., 2/6
	*2-i Meditsinskii institut (Second Medical Institute)	M. Pirogovskaia ul., 1
	*Meditsinskii stomatologicheskii institut (Medical Stomatological Institute)	Kaliaevskaia ul., 18
	*Vsesoiuznyi gosudarstvennyi institut kinematografii (All-Union State Institute of Cinematography)	3-i Sel'skokhoziaistvennyi proezd, 3
	*Gosudarstvennaia konservatoriia (State Conservatory)	ul. Gertsena, 13
	*Gosudarstvennyi muzykal'no-pedagogicheskii institut (State Music-Pedagogy Institute)	ul. Vorovskogo, 30/36

*Gosudarstvennyi institut teatral'nogo iskusstva (State Institute of Theatrical Arts)	Sobinovskii per., 4
Teatral'noe uchilishche im. M. S. Shchepkina (M. S. Shchepkin Theatrical School)	Heglinnaia ul., 2/6
Teatral'noe uchilishche im. B. V. Shchukina (B. V. Shchukin Theatrical School)	ul. Vakhtangova, 12-a
Shkola-studiia im. V. I. Nemirovicha-Danchenko (V. I. Nemirovich-Danchenko Studio School)	pr. Khudozhestvennogo teatra, 3-a
*Gosudarstvennyi khudozhestvennyi institut (State Art Institute)	Tovarishcheskii per. 30
Vysshee khydozhestvenno-promyshlennoe uchilishche (Higher Art Industrial School)	Volokolamskoe shosse, 9
*Literaturnyi institut (Literary Institute)	Tverskoi bul'var, 25
*Gosudarstvennyi institut fizicheskoi kul'tury i sporta (State Institute of Physical Culture and Sports)	ul. Kazakova, 18
*Vsesoiuznyi zaochnyi politekhnicheskii institut (All-Union Correspondence Polytechnical Institute)	Mazutnyi pr., 22
*Vsesoiuznyi zaochnyi energeticheskii institut (All-Union Correspondence Power Institute)	Krasnokazarmennaia ul. 14
Vsesoiuznyi zaochnyi mashinostroitel'nyi institut (All-Union Correspondence Machine Construction Institute)	5-aia Babaevskaia ul., 3
*Vsesoiuznyi zaochnyi institut inzhenerov zheleznodorozhnogo transporta (All-Union Correspondence Institute of Railway Transportation Engineers)	ul. Chasovaia, 22/2
*Vsesoiuznyi zaochnyi institut tekstil'noi i legkoi promyshlennosti (All-Union Correspondence Institute of Textiles and Light Industry)	Shabolovka, 24
*Vsesoiuznyi zaochnyi inzhenerno-stroitel'nyi institut (All-Union Correspondence Engineering-Construction Institute)	Sredniaia Kalitnikovskaia ul., 30

See footnotes at end of table.

City[2]	Institution	Address
158. Moskva (Moscow)—Con.	Vsesoiuznyi zaochnyi elektrotekhnicheskii institut sviazi (All-Union Correspondence Electrotechnical Communications Institute)	Aviamotornaia ul., 8
	Vsesoiuznyi zaochnyi institut pishchevoi promyshlennosti (All-Union Correspondence Institute of the Food Industry)	Ul'ianovskaia ul., 30
	*Vsesoiuznyi zaochnyi finansovo-ekonomicheskii institut (All-Union Correspondence Finance-Economics Institute)	Kuznetskii most, 15
	*Vsesoiuznyi iuridicheskii zaochnyi institut (VIUZI) (All-Union Juridical Correspondence Institute)	ul. F. Engel'sa, 3/5
	Zaochnyi institut sovetskoi torgovli (Correspondence Institute of Soviet Trade)	Kuznetskii most, 14
	Zavod-vtuz pri Moskovskom avtomobil'nom zavode im. I. A. Likhacheva (Higher Technical School attached to the Moscow I. A. Likhachev Automobile Plant)	Avtozavodskaia ul., 9
	Zaochnyi pedagogicheskii institut (Correspondence Pedagogical Institute)	ploshchad' Revoliutsii, 3/1
	Fakul'tet Vsesoiuznogo iuridicheskogo zaochnogo instituta (Faculty of the All-Union Juridical Correspondence Institute)	Prodol'nyi per., 3
	Filial Zaochnogo instituta sovetskoi torgovli (Affiliate of the Correspondence Institute of Soviet Trade)	Stremiannyi per., 28
159. Mozyr', Belorusskoi SSR	Pedagogicheskii institut (Pedagogical Institute)	ul. Lenina, 1/17
160. Murmansk	Vysshee morekhodnoe uchilishche (Higher Navigation School)	Sportivnaia ul., 13/6
	Pedagogicheskii institut (Pedagogical Institute)	Krasnoarmeiskaia ul., 15

161. Murom, Vladimirskoi obl.	Pedagogicheskii institut (Pedagogical Institute)	ul. Karla Marksa, 24
	Obshchetekhnicheskii zaochnyi fakul'tet Vsesoiuznogo zaochnogo mashinostroitel'nogo instituta (General Technical Correspondence Faculty of the All-Union Correspondence Machine Construction Institute)	
162. Nal'chik	Kabardino-Balkarskii gosudarstvennyi universitet (Kabardino-Balkarsk State University)	ul. Chernyshevskogo, 97
163. Namangan, Uzbekskoi SSR	Pedagogicheskii institut (Pedagogical Institute)	Kommunisticheskaia ul., 63
164. Nebit - Dag, Turkmenskoi SSR	Zaochnoe otdelenie Moskovskogo instituta neftekhimicheskoi i gazovoi promyshlennosti (Correspondence Division of the Moscow Institute of the Petrochemical and Gas Industry)	
165. Nezhin, Ukrainskoi SSR	Pedagogicheskii institut (Pedagogical Institute)	ul. Kropivianskogo
166. Nikolaev, Ukrainskoi SSR	*Korablestroitel'nyi institut (Shipbuilding Institute)	ul. Komsomol'skaia, 24
	Pedagogicheskii institut (Pedagogical Institute)	ul. Rozy Liuksemburg, 24
167. Nikopol', Ukrainskoi SSR	Obshchetekhnicheskii zaochnyi fakul'tet Dnepropetrovskogo metallurgicheskogo instituta (General-Technical Correspondence Faculty of the Dnepropetrovsk Metallurgical Institute)	
168. Nizhnii Tagil, Sverdlovskoi obl.	Vechernii filial Ural'skogo politekhnicheskogo instituta (Evening Affiliate of the Ural Polytechnical Institute)	
	Pedagogicheskii institut (Pedagogical Institute)	ul. Mira, 25
169. Noril'sk, Krasnoiarskogo kraia	Vechernii industrial'nyi institut (Evening Industrial Institute)	

See footnotes at end of table.

City[2]	Institution	Address
170. Novaia Kakhovka, Ukrainskoi SSR	Obshchetekhnicheskii zaochnyi fakul'tet Odesskogo inzhenerno-stroitel'nogo instituta (General Technical Correspondence Faculty of the Odessa Engineering Construction Institute)	Pionerskaia ul., 8
171. Novaia Vil'nia, Litovskoi SSR	Uchitel'skii institut (Teachers' Institute)	ul. Polidovo, 29
172. Novgorod, oblastnoi	Pedagogicheskii institut (Pedagogical Institute)	pos. Antonovo
173. Novocherkassk, Rostovskoi obl.	*Politekhnicheskii institut (Polytechnical Institute)	ul. Prosveshcheniia, 132
	*Zooveterinarnyi institut (Zooveterinary Institute)	Podtelkovskii prosp., 35
	*Inzhenerno-meliorativnyi institut (Land Reclamation Engineering Institute)	Pushkinskaia ul., 101
174. Novogeorgievsk, Ukrainskoi SSR	Obshchetekhnicheskii zaochnyi fakul'tet Poltavskogo inzhenerno-stroitel'nogo instituta (General-Technical Correspondence Faculty of the Poltavo Engineering Construction Institute)	
175. Novokamsk	Filial Moskovskogo khimiko-tekhnologicheskogo instituta im. D. I. Mendeleeva (Affiliate of the Moscow D. I. Mendeleev Chemical-Technological Institute)	
176. Novo-Kuibyshevsk, Kuibyshevskoi obl.	Vechernee otdelenie Kuibyshevskogo industrial'nogo instituta (Evening Division of the Kuibyshev Industrial Institute)	
177. Novokuznetsk, Kemerovskoi obl.	*Sibirskii metallurgicheskii institut (Sibirsk Metallurgical Institute)	Rudokoprovaia ul., 49
	Pedagogicheskii institut (Pedagogical Institute)	Shkol'naia ul., 7

178. Novosibirsk	Gosudarstvennyi universitet (State University)	Sovetskaia ul., 25
	*Elektrotekhnicheskii institut (Electrotechnical Institute)	prosp. Karla Marksa, 23
	*Inzhenerno-stroitel'nyi institut (Engineering Construction Institute)	Leningradskaia ul., 57
	*Sel'skokhoziaistvennyi institut (Agricultural Institute)	Bol'shevistskaia ul., 172
	*Institut inzhenerov geodezii, aerofotos'emki i kartografii (Institute of Geodosy, Aerophotography, and Cartography Engineers)	Potaninskaia ul., 27
	Elektrotekhnicheskii institut sviazi (Electrotechnical Communications Institute)	ul. Kirova, 58
	Institute inzhenerov zheleznodorozhnogo transporta (Institute of Railway Transportation Engineers)	ul. Dusi Koval'chuk, 181
	*Institut inzhenerov vodnogo transporta (Institute of Water Transportation Engineers)	prosp. Lenina, 18
	Institut sovetskoi kooperativnoi torgovli (Institute of Soviet Cooperative Trade)	prosp. Karla Marksa, 24
	Gosudarstvennaia konservatoriia (State Conservatory)	Sovetskaia ul., 31
	*Meditsinskii institut (Medical Institute)	Krasnyi prospekt, 58
	*Pedagogicheskii institut (Pedagogical Institute)	Komsomol'skii prospekt, 20
	Fakul'tet Vsesoiuznogo iuridicheskogo zaochnogo instituta (Faculty of the All-Union Juridical Correspondence Institute)	Krasnyi prosp., 12
	Filial Vsesoiuznogo zaochnogo finansovo-ekonomicheskogo instituta (Affiliate of the All-Union Correspondence Finance-Economics Institute)	Krasnyi prosp., 48

See footnotes at end of table.

City[2]	Institution	Address
178. Novosibirsk—Continued	Filial Zaochnogo instituta sovetskoi torgovli (Affiliate of the Correspondence Institute of Soviet Trade)	Kamenskaia ul., 66
179. Novozybkov, Brianskoi obl.	Pedagogicheskii institut (Pedagogical Institute)	Leninskaia ul., 11
180. Novyi Zlatoust, Cheliabinskoi obl.	Vechernee otdelenie Cheliabinskogo politekhnicheskogo instituta (Evening Division of the Cheliabinsk Polytechnical Institute)	
181. Nukus, Uzbekskoi SSR	Kara-Kalpakskii pedagogicheskii institut (Karakalpak Pedagogical Institute)	ul. Kalinina
182. Odessa	*Gosudarstvennyi universitet (State University)	ul. Shchepkina, 12
	*Politekhnicheskii institut (Polytechnical Institute)	Novo-Arkadiiskaia doroga, 1
	*Institut inzhenerov morskogo flota (Institute of Maritime Engineers)	ul. Mechnikova, 34
	Vysshee inzhenernoe morskoe uchilishche (Higher Engineering Maritime School)	ul. Perekopskoi pobedy, 20
	Elektrotekhnicheskii institut sviazi (Electrotechnical Communications Institute)	ul. Cheliuskintsev, 1/3
	Gidrometeorologicheskii institut (Hydrometeorological Institute)	ul. Chkalova, 2-a
	*Tekhnologicheskii institut pishchevoi i kholodil'noi promyshlennosti (Technological Institute of the Food and Refrigeration Industry)	ul. Petra Velikogo, 1/3
	*Tekhnologicheskii institut im. M. V. Lomonosova (M. V. Lomonosov Technological Institute)	ul. Sverdlova, 112
	Kreditno-ekonomicheskii institut (Credit-Economics Institute)	ul. Sovetskoi Armii, 8

	*Sel'skokhoziaistvennyi institut (Agricultural Institute)	ul. Sverdlova, 99
	*Meditsinskii institut (Medical Institute)	Meditsinskii per., 2
	Gosudarstvennaia konservatoriia (State Conservatory)	ul. Ostrovidova, 63
	*Pedagogicheskii institut (Pedagogical Institute)	Komsomol'skaia, 26
	*Inzhenerno-stroitel'nyi institut (Engineering Construction Institute)	ul. Didrikhsona, 4
183. Oktiabr'skii, Bashkirskoi ASSR	Vechernee otdelenie Ufimskogo neftianogo instituta (Evening Division of the Ufa Oil Institute)	
184. Omsk	*Mashinostroitel'nyi institut (Machine Construction Institute)	ul. Dolgireva, 60
	*Sibirskii avtomobil'no-dorozhnyi institut (Sibirsk Automobile-Highway Institute)	ul. Lenina, 20
	Omskii institut inzhenerov zheleznodorozhnogo transporta (Omsk Institute of Railway Transport Engineers)	ul. K. Marksa, 36
	*Meditsinskii institut (Medical Institute)	ul. Lenina, 9
	*Sel'skokhoziaistvennyi institut (Agricultural Institute)	Zagorodnaia Roshcha
	Veterinarnyi institut (Veterinary Institute)	Oktiabr'skaia ul., 64
	Pedagogicheskii institut (Pedagogical Institute)	Partizanskaia ul., 4-a
	Gosudarstvennyi institut fizicheskoi kul'tury (State Institute of Physical Culture)	ul. Lenina, 21
	Vechernii fakul'tet Moskovskogo instituta neftekhimicheskoi i gazovoi promyshlennosti (Evening Faculty of the Moscow Institute of the Petrochemical and Gas Industry)	

See footnotes at end of table.

City[2]	Institution	Address
185. Ordzhonikidze	*Severo-Kavkazskii gornometallurgicheskii institut (North Caucasus Mining-Metallurgy Institute)	Vtuzgorodok
	*Severo-Osetinskii sel'skokhoziaistvennyi institut (North-Ossetian Agricultural Institute)	Timiriazevskii per., 3/5
	*Severo-Osetinskii pedagogicheskii institut (North-Ossetian Pedagogical Institute)	ul. Markusa, 24
	Severo-Osetinskii meditsinskii institut (North-Ossetian Medical Institute)	Pushkinskaia ul., 40
186. Orekhovo-Zuevo, Moskovskoi obl.	*Pedagogicheskii institut (Pedagogical Institute)	Zelenaia ul., 10
187. Orel	*Pedagogicheskii institut (Pedagogical Institute)	Komsomol'skaia ul., 95
	Obshchetekhnicheskii zaochnyi fakul'tet Vsesoiuznogo zaochnogo mashinostroitel'nogo instituta (General Technical Correspondence Faculty of the All-Union Correspondence Machine Construction Institute)	
188. Orenburg	Sel'skokhoziaistvennyi institut (Agricultural Institute)	ul. Cheliuskintsev, 18
	Pedagogicheskii institut (Pedagogical Institute)	Sovetskaia ul., 19
	Meditsinskii institut (Medical Institute)	Sovetskaia ul., 6
	Filial Kuibyshevskogo industrial'nogo instituta (Affiliate of the Kuibyshev Industrial Institute)	
189. Orsk, Orenburgskoi obl.	Pedagogicheskii institut (Pedagogical Institute)	Sovetskaia ul., 67
	Filial Vsesoiuznogo zaochnogo politekhnicheskogo instituta (Affiliate of the All-Union Correspondence Polytechnical Institute)	Rabochaia ul., 3

190. Osh, Kirgizskoi SSR	Pedagogicheskii institut (Pedagogical Institute)	Raboche-Dekhkanskaia ul., 340
191. Otradnyi, Kuibyshevskoi obl.	Vechernii obshchetekhnicheskii fakul'tet industrial'nogo instituta (Evening Division of the Kuibyshev Industrial Institute)	
192. Panevezhis, Litovskoi SSR	Vechernee otdelenie Kaunasskogo politekhnicheskogo instituta (Evening Division of the Kaunas Polytechnical Institute)	
193. Pavlodar, Kazakhskoi SSR	Industrial 'nyi institut (Industrial Institute)	
194. Pavlov-Posad, Moskovskoi obl.	Vechernee otdelenie Moskovskogo tekstil'nogo instituta (Evening Division of the Moscow Textile Institute)	
195. Penza	Politekhnicheskii institut (Polytechnical Institute)	Krasnaia ul., 40
	*Inzhenerno-stroitel'nyi institut (Engineering Construction Institute)	Rogatka
	Sel'skokhoziaistvennyi institut (Agricultural Institute)	Akhuny
	Pedagogicheskii Institut (Pedagogical Institute)	Sadovaia, 37
	Filial Vsesoiuznogo zaochnogo finansovo-ekonomicheskogo instituta (Affiliate of the All-Union Correspondence Finance-Economics Institute)	ul. Volodarskogo, 98/5
	Penzenskii zavod-vtuz (Penza [plant] Higher Technical Educational Institution)	
196. Perm'	*Gosudarstvennyi universitet (State University)	ul. Genkelia, 7
	Politekhnicheskii institut (Polytechnical Institute) *[Graduate study in Mining Institute, same address]	Komsomol'skii prosp., 51-a
	*Meditsinskii institut (Medical Institute)	Kommunisticheskaia ul., 26

See footnotes at end of table.

City[2]	Institution	Address
196. Perm'—Continued	*Sel'skokhoziaistvennyi institut (Agricultural Institute)	Kommunisticheskaia ul., 23
	Farmatsevticheskii institut (Pharmaceutical Institute)	ul. Lenina, 48
	*Pedagogicheskii institut (Pedagogical Institute)	ul. Karla Marksa, 24
	Vechernii fakul'tet Kazanskogo khimiko-tekhnologicheskogo instituta (Evening Faculty of the Kazan Chemical-Technological Institute)	
197. Persianovka, Rostovskoi obl.	Azovo-Chernomorskii sel'skokhoziaistvennyi institut (Azov-Black Sea Agricultural Institute)	
198. Petropavlovsk, Kazakhskoi SSR	Pedagogicheskii institut (Pedagogical Institute)	ul. Kirova, 97
199. Petropavlovsk - na - Kamchatke	Kamchatskii pedagogicheskii institut (Kamchatka Pedagogical Institute)	Naberezhnaia ul., 26
	Zaochnoe otdelenie Dal'nevostochnogo tekhnicheskogo instituta rybnoi promyshlennosti i khoziaistva (Correspondence Division of the Far East Technical Institute of the Fish Industry and Economy)	
200. Petrozavodsk	*Gosudarstvennyi universitet (State University)	prosp. Lenina, 71
	Karel'skii pedagogicheskii institut (Karelian Pedagogical Institute)	prosp. Lenina, 79
201. Piatigorsk	*Pedagogicheskii institut (Pedagogical Institute)	prosp. im. Kirova, 70
202. Podol'sk, Moskovskoi obl.	Filial Vechernego fakul'teta Moskovskogo tekhnologicheskogo instituta legkoi promyshlennosti (Affiliate of the Evening Faculty of the Moscow Technological Institute of Light Industry)	

203. Poltava	Inzhenerno-stroitel'nyi institut (Engineering Construction Institute)	prosp. 1 Maia, 24
	Sel'skokhoziaistvennyi institut (Agricultural Institute)	ul. Skovorody, 1/3
	Pedagogicheskii institut (Pedagogical Institute)	ul. Ostrogradskogo, 2
204. Przheval'sk, Kirgizskoi SSR	Pedagogicheskii institut (Pedagogical Institute)	Sadovaia ul., 11
205. Pskov	Pedagogicheskii institut (Pedagogical Institute)	Sovetskaia ul., 21
206. Pushkin, Leningradskoi obl.	*Leningradskii sel'skokhoziaistvennyi institut (Leningrad Agricultural Institute)	Komsomol'skaia ul., 14
207. Riazan	Radiotekhnicheskii institut (Radiotechnical Institute)	ul. Gagarina, 59/1
	*Pedagogicheskii institut (Pedagogical Institute)	ul. Svobody, 46
	Sel'skokhoziaistvennyi institut (Agricultural Institute)	ul. Sverdlova, 26
	*Meditsinskii institut (Medical Institute)	ul. Maiakovskogo, 7
208. Riga	*Latviiskii gosudarstvennyi universitet (Latvian State University)	Bul'var Rainisa, 19
	*Politekhnicheskii institut (Polytechnical Institute)	ul. Lenina, 1
	Institut inzhenerov grazhdanskogo vozdushnogo flota (Institute of the Civil Air Force Engineers)	ul. Lomonosova, 1
	*Meditsinskii institut (Medical Institute)	bul'var Padom'iu, 12
	Gosudarstvennaia konservatoriia (State Conservatory)	ul. Krish'iana Barona, 1
	Gosudarstvennaia akademiia khudozhestv (State Academy of Arts)	bul'var Kommunarov, 13

See footnotes at end of table.

City[2]	Institution	Address
208. Riga—Continued	Latviiskii institut fizicheskoi kul'tury (Latvian Institute of Physical Culture)	ul. Lenina, 333
209. Rostov-na-Donu	*Gosudarstvennyi universitet (State University)	ul. Fridrikha Engel'sa, 115
	*Institut sel'skokhoziaistvennogo mashinostroeniia (Institute of Agricultural Machine Construction)	ploshchad' Gagarina
	*Inzhenerno-stroitel'nyi institut (Engineering Construction Institute)	Sotsialisticheskaia ul. 150
	*Institut inzhenerov zheleznodorozhnogo transporta (Institute of Railway Transportation Engineers)	Novyi Gorod
	*Finansovo-ekonomicheskii institut (Finance-Economics Institute)	ul. Fridrikha Engel'sa, 77
	*Meditsinskii institut (Medical Institute)	Nakhichevanskii per., 31-a
	*Pedagogicheskii institut (Pedagogical Institute)	ul. Fridrikha Engel'sa, 33
	Zavod-vtuz pri Rostovskom zavode sel'skokhoziaistvennogo mashinostroeniia (Plant-Higher Technical Educational Institution, attached to the Rostov Plant of Agricultural Machine Construction)	pos. Sel'mash, Studencheskaia ul., 12
	Filial Vsesoiuznogo zaochnogo instituta pishchevoi promyshlennosti (Affiliate of the All-Union Correspondence Institute of the Food Industry)	ul. Fridrikha Engel'sa, 90
	Filial Zaochnogo instituta sovetskoi torgovli (Affiliate of the Correspondence Institute of Soviet Trade)	Budennovskii prosp., 49
210. Rovno, Ukrainskoi SSR	Pedagogicheskii institut (Pedagogical Institute)	Vostochnaia ul., 21

	Ukrainskii institut inzhenerov vodnogo khoziaistva (Ukrainian Institute of Engineers of Water Economy)	ul. Leninskaia, 3-b
211. Rubezhnoe, Ukrainskoi SSR	Obshchetekhnicheskii zaochnyi fakul'tet Khar'kovskogo politekhnicheskogo instituta (General Technical Correspondence Faculty of the Kharkov Polytechnical Institute)	Institutskaia ul., 28
212. Rubtsovsk	Vechernee otdelenie Altaiskogo politekhnicheskogo instituta (Evening Division of the Altai Polytechnical Institute)	
213. Rudnyi, Kazakhskoi SSR	Vechernii fakul'tet Kazakhskogo politekhnicheskogo instituta (Evening Affiliate of the Kazakh Polytechnical Institute)	
214. Rybinsk	Vechernii aviatsionno-tekhnologicheskii institut (Evening Aviation-Technological Institute)	
215. Salavat, Bashkirskoi ASSR	Vechernii fakul'tet Moskovskogo instituta neftekhimicheskoi i gazovoi promyshlennosti (Evening Faculty of the Moscow Institute of the Petrochemical and Gas Industry)	
216. Samarkand, Uzbekskoi SSR	*Uzbekskii gosudarstvennyi universitet (Uzbek State University)	bul'var Gor'kogo, 15
	Sel'skokhoziaistvennyi institut (Agricultural Institute)	ul. Karla Marksa, 83
	Kooperativnyi institut (Cooperative [Trade] Institute)	Kommunisticheskaia ul., 47
	*Meditsinskii institut (Medical Institute)	Kommunisticheskaia ul., 35
217. Saransk, Mordovskoi ASSR	*Mordovskii gosudarstvennyi universitet (Mordovian State University)	Bol'shevistskaia ul., 68
218. Saratov	*Gosudarstvennyi universitet (State University)	Astrakhanskaia ul., 83
	Politekhnicheskii institut (Polytechnical Institute)	Krainiaia ul., 77
	*[Graduate study at the Automobile-Highway Institute, same address]	

See footnotes at end of table.

City[2]	Institution	Address
218. Saratov—Continued	*Zooveterinarnyi institut (Zooveterinary Institute)	B. Sadovaia ul., 220
	*Institut mekhanizatsii sel'skogo khoziaistva (Institute of the Mechanization of Agriculture)	Sovetskaia ul., 60
	*Sel'skokhoziaistvennyi institut (Agricultural Institute)	pl. Revoliutsii, 1
	*Ekonomicheskii institut (Economics Institute)	pl. Revoliutsii, 11
	*Iuridicheskii institut (Juridical Institute)	ul. M. Gor'kogo, 45
	*Meditsinskii institut (Medical Institute)	ul. 20-letiia VLKSM, 112
	Gosudarstvennaia konservatoriia (State Conservatory)	prosp. Kirova, 1
	*Pedagogicheskii institut (Pedagogical Institute)	ul. Michurina, 92
	Filial Zaochnogo instituta sovetskoi torgovli (Affiliate of the Correspondence Institute of Soviet Trade)	ul. M. Gor'kogo, 45
219. Semipalatinsk, Kazakhskoi* SSR	Zooveterinarnyi institut (Zooveterinary Institute)	ul. Uritskogo, 17
	Meditsinskii institut (Mebical Institute)	
	Pedagogicheskii institut (Pedagogical Institute)	Sovetskaia ul., 84
220. Sevastopol'	Filial Odesskogo politekhnicheskogo instituta s dnevnym i vechernim otdeleniiami i obshchetekhnicheskim zaochnym fakul'tetom (Affiliate of the Odessa Polytechnical Institute with Day and Evening Divisions and General-Technical Correspondence Faculty)	ul. Gogolia, 14

221. Shadrinsk, Kurganskoi obl.	Pedagogicheskii institut (Pedagogical Institute)	ul. K. Libknekhta, 4
222. Shakhty, Kamenskoi obl.	Pedagogicheskii institut (Pedagogical Institute)	ul. Shevchenko, 147
	Filial Novocherkasskogo politekhnicheskogo instituta (Affiliate of the Novocherkass Polytechnical Institute)	
223. Shiauliai, Litovskoi SSR	Pedagogicheskii institut (Pedagogical Institute)	ul. Vitauto, 84
	Vechernee otdelenie Kaunasskogo politekhnicheskogo instituta (Evening Division of the Kaunas Polytechnical Institute)	
224. Shuia, Ivanosvsko obl.	Pedagogicheskii institut (Pedagogical Institute)	Sovetskaia ul., 40
225. Simferopol'	*Krymskii sel'skokhoziaistvennyi institut (Crimean Agricultural Institute)	ul. Michurina, 2
	*Krymskii meditsinskii institut (Crimean Medical Institute)	bul'var Lenina, 5/7
	*Krymskii pedagogicheskii institut (Crimean Pedagogical Institute)	ul. Lenina, 11
	Obshchetekhnicheskii zaochnyi fakul'tet Odesskogo tekhnologicheskogo instituta pishchevoi i kholodil'noi promyshlennosti (General-Technical Correspondence Faculty of the Odessa Technological Institute of the Food and Refrigeration Industry)	
226. Slaviansk, Donetskoi obl., Ukrainskoi SSR	Pedagogicheskii institut (Pedagogical Institute)	ul. Lenina, 10
	Obshchetekhnicheskii zaochnyi fakul'tet Ukrainskogo zaochnogo politekhnicheskogo instituta (General-Technical Correspondence Faculty of the Ukrainian Correspondence Polytechnical Institute)	ul. Iunykh Kommunarov, 138
227. Smolensk	*Meditsinskii institut (Medical Institute)	ul. Glinki, 3
	Pedagogicheskii institut (Pedagogical Institute)	ul. Przheval'skogo, 4

See footnotes at end of table.

City[2]	Institution	Address
227. Smolensk—Continued	Gosudarstvennyi institut fizicheskoi kul'tury (State Institute of Physical Culture)	ul. Gagarina, 21
228. Stanislav, Ukrainskoi SSR	Pedagogicheskii institut (Pedagogical Institute)	ul. Shevchenko, 55
	Meditsinskii institut (Medical Institute)	ul. 1-go Maia, 7
	Obshchetekhnicheskii zaochnyi fakul'tet L'vovskogo politekhnicheskogo instituta (General-Technical Correspondence Faculty of the Lvov Polytechnical Institute)	Sovetskaia ul., 59
229. Stavropol', kraevoi	*Sel'skokhoziaistvennyi institut (Agricultural Institute)	Zootekhnicheskii per., 10
	*Pedagogicheskii institut (Pedagogical Institute)	ul. Pushkina, 1
	Meditsinskii institut (Medical Institute)	ul. P. Morozova, 8
230. Stavropol', Kuibyshevskoi obl.	Filial Kuibyshevskogo industrial'nogo instituta (Affiliate of the Kuibyshev Industrial Institute)	
231. Sterlitamak, Bashkirskoi ASSR	Pedagogicheskii institut (Pedagogical Institute)	Komsomol'skaia ul., 67
232. Sukhumi, Gruzinskoi SSR	Gruzinskii institut subtropicheskogo khoziaistva (Georgian Institute of Subtropical Economy)	Kelasuri
233. Sumy, Ukrainskoi SSR	Obshchetekhnicheskii zaochnyi fakul'tet Ukrainskogo zaochnogo politekhnicheskogo instituta (General-Technical Correspondence Faculty of the Ukrainian Correspondence Polytechnical Institute)	ul. Privokzal'naia, 9
	Pedagogicheskii institut (Pedagogical Institute)	ul. Dzerzhinskogo, 3

234. Sverdlovsk	*Ural'skii gosudarstvennyi universitet (Ural State University)	ul. Kuibysheva, 48-a
	*Ural'skii politekhnicheskii institut (Ural Polytechnical Institute)	Vtuzgorodok, Glavnyi uchebenyi korpus
	*Gornyi institut (Mining Institute)	ul. Kuibysheva, 30
	*Ural'skii lesotekhnicheskii institut (Ural Forestry Technical Institute)	Sibirskii trakt, 5-i kilometr
	Sel'skokhoziaistvennyi institut (Agricultural Institute)	ul. Karla Libnekhta, 42
	*Meditsinskii institut (Medical Institute)	pl. Kommunarov
	*Iuridicheskii institut (Juridical Institute)	ul. Malysheva, 2-b
	*Ural'skaia gosudartsvennaia konservatoriia (Ural State Conservatory)	ul. Lenina, 26
	*Pedagogicheskii institut (Pedagogical Institute)	ul. Karla Libknekhta, 9
	Ural'skii elektromekhanicheskii institut inzhenerov zheleznodorozhnogo transporta (Ural Electromechanical Institute of Railway Transportation Engineers)	ul. Bykova, 34-a
	Filial Vsesoiuznogo zaochnogo finansovo-ekonomicheskogo instituta (Affiliate of the All-Union Correspondence Finance-Economics Institute)	ul. Mamina-Sibiriaka, 49
	Filial Zaochnogo instituta sovetskoi torgovli (Affiliate of the Correspondence Institute of Soviet Trade)	ul. Dekabristov, 20
	Pedagogicheskii institut (Pedagogical Institute)	
235. Syktyvkar, Komi ASSR	Komi pedagogicheskii institut (Komi Pedagogical Institute)	Kommunisticheskaia ul., 21

See footnotes at end of table.

City[2]	Institution	Address
235. Syktyvkar, Komi ASSR—Continued	Filial Vsesouiznogo zaochnogo lesotekhnicheskogo instituta (Affiliate of the All-Union Correspondence Timber Engineering Institute)	
236. Syzran', Kuibyshevskoi obl.	Obshchetekhnicheskii fakul'tet Kuibyshevskogo industrial'nogo instituta (General-Technical Faculty of the Kuibyshev Industrial Institute)	
237. Taganrog, Rostovskoi obl.	*Radiotekhnicheskii institut (Radiotechnical Institute)	ul. Chekhova, 22
	Pedagogicheskii institut (Pedagogical Institute)	Turgenevskii per., 32
238. Tallin, Estonskoi SSR	*Politekhnicheskii institut (Polytechnical Institute)	ul. Kalinina, 101
	Gosudarstvennaia konservatoriia (State Conservatory)	bul'var Suvorova, 3
	Gosudarstvennyi khudozhestvennyi institut (State Art Institute)	Tartuskoe shosse, 11
	Pedagogicheskii institut (Pedagogical Institute)	Narvskoe shosse, 57
239. Tambov	*Pedagogicheskii institut (Pedagogical Institute)	Sovetskaia ul., 93
	Vechernii fakul'tet Moskovskogo instituta khimicheskogo mashinostroeniia (Evening Faculty of the Moscow Institute of Chemical Machine Construction)	
240. Tartu, Estonskoi SSR	*Gosudarstvennyi universitet (State University)	ul. Iulikooli, 18
	*Estonskaia sel'skokhoziaistvennaia akademiia (Estonian Agricultural Academy)	ploshchad Lenina, 1

241. Tashkent, Uzbekskoi SSR	*Gosudarstvennyi universitet (State University)	ul. Karla Marksa, 32
	*Politekhnicheskii institut (Polytechnical Institute)	Assakinskaia ul., 16
	*Institut inzhenerov zheleznodorozhnogo transporta (Institute of Railway Transportation Engineers)	Oboronnaia ul., 1
	Elektroteknicheskii institut sviazi (Electrotechnical Communications Institute)	ul. Labzak, 112
	*Tekstil'nyi institut (Textile Institute)	Akademicheskaia ul., 7
	*Sel'skokhoziaistvennyi institut (Agricultural Institute)	ul. Kirova, 32
	*Institut irrigatsii i mekhanizatsii sel'skogo khoziaistva (Institute of Irrigation and Mechanization of Agriculture)	Uchitel'skaia ul., 39
	*Finansovo-ekonomicheskii institut (Finance-Economics Institute)	ul. Arpapaia, pr. Kryk-Gul', 10
	*Meditsinskii institut (Medical Institute)	ul. Karla Marksa, 85
	Farmatsevticheskii institut (Pharmaceutical Institute)	ul. Karla Marksa, 103
	*Pedagogicheskii institut (Pedagogical Institute)	Pedagogicheskaia ul., 63
	Pedagogicheskii institut inostrannykh iazykov (Pedagogical Institute of Foreign Languages)	Sapernaia ul., 11
	Gosudarstvennaia konservatoriia (State Conservatory)	Pushkinskaia ul., 31
	Gosudarstvennyi teatral'no-khudozhestvennyi institut (State Theatrical Arts Institute)	Shelkovichnaia ul., 75
	Uzbekskii gosudarstvennyi institut fizicheskoi kul'tury (Uzbek State Institute of Physical Culture)	ul. Akhunbabaeva, 6

See footnotes at end of table.

City[2]	Institution	Address
242. Tbilisi, Gruzinskoi SSR	*Gosudarstvennyi universitet (State University)	prosp. Chavchavadze, 1
	*Gruzinskii politekhnicheskii institut (Georgian Polytechnical Institute)	ul. Lenina, 98
	*Gruzinskii sel'skokhoziaistvennyi institut (Georgian Agricultural Institute)	prosp. Chavchavadze, 33
	Gruzinskii zooveterinarnyi uchebenoissledovatel'skii institut (Georgian Zooveterinary Educational Research Institute)	prosp. Chavchavadze, 49
	*Meditsinskii institute (Medical Institute)	ul. Melikishvili, 16
	*Gosudarstvennaia konservatoriia (State Conservatory)	ul. Griboedova, 8
	*Akademiia khudozhestv (Academy of Arts)	ul. Griboedova, 22
	*Gruzinskii gosudarstvennyi institut fizicheskoi kul'tury (Georgian State Institute of Physical Culture)	prosp. Chavchavadze, 43
	Gruzinskii gosudarstvennyi teatral'nyi institut (Georgian State Theatrical Institute)	prosp. Rustaveli, 17
	*Pedagogicheskii institut (Pedagogical Institute)	prosp. Chavchavadze, 32
	*Pedagogicheskii institut inostrannykh iazykov (Pedagogical Institute of Foreign Languages)	ul. Paliashvili, 51
243. Telavi, Gruzinskoi SSR	Pedagogicheskii institut (Pedagogical Institute)	ul. Irakliia, 1
244. Temir-Tau	Vechernii fakul'tet Karagandinskogo politekhnicheskogo instituta (Evening Faculty of the Karaganda Polytechnical Institute)	
245. Ternopol', Ukrainskoi SSR	Meditsinskii institut (Medical Institute)	Teatral'naia pl., 2

	Obshchetekhnicheskii zaochnyi fakul'tet L'vovskogo politekhnicheskogo instituta (General-Technical Correspondence Faculty of the Lvov Polytechnical Institute)	ul. Lenina, 38
246. Tiraspol', Moldavskoi SSR	Pedagogicheskii institut (Pedagogical Institute)	ul. 25 Oktiabria, 128
247. Tiumen	Sel'skokhoziaistvennyi institut (Agricultural Institute)	ul. Respubliki, 7
	Pedagogicheskii institut (Pedagogical Institute)	ul. Semakova, 10
248. Tobol'sk, Tiumenskoi obl.	Pedagogicheskii institut (Pedagogical Institute)	ul. Rozy Liuksemburg, 15
249. Tomsk	*Gosudarstvennyi universitet (State University)	prosp. Lenina, 36
	*Politekhnicheskii institut (Polytechnical Institute)	prosp. im. Lenina, 30
	*Meditsinskii institut (Medical Institute)	Moskovskii trakt, 2
	*Inzhenerno-stroitel'nyi institut (Engineering Construction Institute)	Solianaia pl., 2
	*Pedagogicheskii institut (Pedagogical Institute)	Kievskaia ul., 60
250. Troitsk, Cheliabinskoi obl.	*Veterinarnyi institut (Veterinary Institute)	ul. Gagarina, 1
251. Tselinograd, Kazakhskoi SSR	Sel'skokhoziaisvennyi institut (Agricultural Institute)	ul. Severnyi vygon, ZhU-4
252. Tskhinvali, Gruzinskoi SSR	Pedagogicheskii institut (Pedagogical Institute)	
253. Tula	*Mekhanicheskii institut (Mechanical Institute)	ul. Kommunarov, 154
	*Gornyi institut (Mining Institute)	ul. Kommunarov, 158

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City[2]	Institution	Address
253. Tula—Continued	*Pedagogicheskii institut (Pedagogical Institute)	ul. Mendeleeva, 7
254. Ufa, Bashkirskoi ASSR	*Bashkirskii gosudarstvennyi universitet (Bashkir State University)	ul. Frunze, 32
	*Neftianoi institut (Petroleum Institute)	ul. Ul'ianovykh, 45
	Aviatsionnyi institut (Aviation Institute)	ul. Lenina, 61
	Bashkirskii meditsinskii institut (Bashkir Medical Institute)	ul. Frunze, 47
	Bashkirskii sel'skokhoziaistvennyi institut (Bashkir Agricultural Institute)	ul. Karla Marksa, 12
	Filial Vsesoiuznogo iuridicheskogo zaochnogo instituta (Affiliate of the All-Union Juridical Correspondence Institute)	ul. Matrosova, 1
	Filial Vsesoiuznogo zaochnogo finansovo-ekonomicheskogo instituta (Affiliate of the All-Union Correspondence Finance-Economics Institute)	ul. Kirova, 65
255. Ukhta, Komi ASSR	Zaochnoe otdelenie Moskovskogo instituta neftekhnimicheskoi i gazovoi promyshlennosti (Correspondence Division of the Moscow Institute of the Petrochemical and Gas Industry)	
256. Ulan-Ude	Buriatskii sel'skokhoziaistvennyi institut (Buriat Agricultural Institute)	ul. Kalandarashvili, 18
	Buriatskii pedagogicheskii institut (Buriat Pedagogical Institute)	ul. Ranzhurova, 11
	Vostochno-Sibirskii gosudarstvennyi bibliotechnyi institut (Eastern Sibirsk State Library Institute)	Rabochaia ul., 20

257. Ul'ianovsk	Vechernii politekhnicheskii institut (Evening Polytechnical Institute)	ul. Engel'sa, 27
	Sel'skokhoziaistvennyi institut (Agricultural Institute)	Novyi venets, 1
	*Pedagogicheskii institut (Pedagogical Institute)	ul. Ul'ianova, 2
258. Uman', Ukrainskoi SSR	Sel'skokhoziaistvennyi institut (Agricultural Institute)	Sofievka
	Pedagogicheskii institut (Pedagogical Institute)	ul. Karla Marksa, 2
259. Ural'sk, Kazakhskoi SSR	Pedagogicheskii institut (Pedagogical Institute)	Sovetskaia ul., 122
260. Urgench, Uzbekskoi SSR	Khorezmskii pedagogicheskii institut (Khorezm Pedagogical Institute)	ul. Gor'kogo, 13
261. Ussuriisk, Primorskogo kraia	Pedagogicheskii institut (Pedagogical Institute)	ul. Chicherina, 54
	Primorskii sel'skokhoziaistvennyi institut (Primorye Agricultural Institute)	Zheleznodorozhnyi prosp., 42
262. Ust-Kamenogorsk, Kazakhskoi SSR	Stroitel'no-dorozhnyi institut (Road Construction Institute)	Ul'binskaia naberezhnaia, 4
	Pedagogicheskii institut (Pedagogical Institute)	Stroiploshchadka
263. Uzhgorod, Ukrainskoi SSR	*Gosudarstvennyi universitet (State University)	pl. M. Gor'kogo, 46
264. Velikie Luki, Pskovskoi obl.	Sel'skokhoziaistvennyi institut (Agricultural Institute)	pl. im. Lenina, 1
	Pedagogicheskii institut (Pedagogical Institute)	pl. Timiriazeva, 1
265. Vil'nius, Litovskoi SSR	*Gosudarstvennyi universitet (State University)	ul. Universiteta, 3
	Pedagogicheskii institut (Pedagogical Institute)	ul. Studentu, 39

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City[2]	Institution	Address
265. Vil'nius, Litovskoi SSR—Continued	Gosudarstvennaia konservatoriia (State Conservatory)	prospekt Lenina, 42
	Gosudarstvennyi khudozhestvennyi institut Litovskoi SSR (State Art Institute of the Lithuanian SSR)	ul. Tiesos, 6
	Filial i vechernee otdelenie Kaunasskogo politekhnicheskogo instituta (Affiliate and Evening Division of the Kaunas Polytechnical Institute)	
266. Vinnitsa, Ukrainskoi SSR	*Meditsinskii institut (Medical Institute)	ul. Pirogova, 42
	Pedagogicheskii institut (Pedagogical Institute)	Krasnoznamennaia ul., 56
	Obshchetekhnicheskii zaochnyi fakul'tet Kievskogo tekhnologicheskogo instituta pishchevoi promyshlennosti (General-Technical Correspondence Faculty of the Kiev Technological Institute of the Food Industry)	ul. R. Liuksemburg, 1/10
267. Vitebsk, Belorusskoi SSR	Veterinarnyi institut (Veterinary Institute)	ul. 1-ia Dovatora, 7/11
	Pedagogicheskii institut (Pedagogical Institute)	ul. Pushkina, 3
	Meditsinskii institut (Medical Institute)	prosp. Frunze, 27
	Obshchetekhnicheskii zaochnyi fakul'tet Belorusskogo politekhnicheskogo instituta (General-Technical Correspondence Faculty of the Belorussian Polytechnical Institute)	
268. Vladimir	Filial Moskovskogo vechernego mashinostroitel'nogo instituta (Affiliate of the Moscow Machine-Construction Evening Institute)	ul. Gor'kogo, 63

	Pedagogicheskii institut (Pedagogical Institute)	Pervomaiskaia ul., 1
269. Vladivostok	*Dal'nevostochnyi gosudarstvennyi universitet (Far East State University)	ul. Sukhanova, 8
	*Dal'nevostochnyi politekhnicheskii institut (Far East Polytechnical Institute)	Pushkinskaia ul., 10
	Dal'nevostochnyi tekhnicheskii institut rybnoi promyshlennosti i khoziaistva (Far East Technical Institute of the Fishing Industry and Economy)	Leninskaia ul., 25
	Vysshee inzhenernoe morskoe uchilishche (Evening Engineering Marine School)	Verkhniaia Portovaia ul., 50-a
	Meditsinskii institut (Medical Institute)	Okeanskii prosp., 79/83
270. Volgograd	*Mekhanicheskii institut (Mechanical Institute)	Sovetskaia ul., 31
	Institut inzhenerov gorodskogo khoziaistva (Institute of Engineers of Rural Economy)	Akademicheskaia ul., 3
	*Sel'skokhoziaistvennyi institut (Agricultural Institute)	Turkmenskaia ul., 55
	*Meditsinskii institut (Medical Institute)	ul. Lenina, 21
	*Pedagogicheskii institut (Pedagogical Institute)	prosp. Lenina, 27
	Gosudarstvennyi institut fizicheskoi kul'tury (State Institute of Physical Culture)	prosp. Lenina, 78
271. Vologda	Molochnyi institut (Dairy Institute)	pos. Molochnoe, prosp. Shmidta, 2
	Pedagogicheskii institut (Pedagogical Institute)	ul. Maiakovskogo, 6

See footnotes at end of table.

City [2]	Institution	Address
272. Vorkuta, Komi ASSR	Vechernii fakul'tet Leningradskogo gornogo instituta (Evening Faculty of the Leningrad Mining Institute)	
273. Voronezh	*Gosudarstvennyi universitet (State University)	ul. 11 maia, 26
	Vechernii politekhnicheskii institut (Evening Polytechnical Institute)	Plekhanovskaia ul., 13
	*Tekhnologicheskii institut (Technological Institute)	prosp. Revoliutsii, 23
	*Inzhenerno-stroitel'nyi Institut (Engineering Construction Institute)	ul. 20-letiia Oktiabria, 146-a
	*Sel'skokhoziaistvennyi institut (Agricultural Institute)	ul. Michurina, 1
	*Lesotekhnicheskii institut (Forestry Technical Institute)	ul. Timiriazeva, 8
	*Meditsinskii institut (Medical Institute)	Studencheskaia ul., 10
	*Pedagogicheskii institut (Pedagogical Institute)	ul. Lenina, 86
	Filial vsesoiuznogo zaochnogo finansovo-ekonomicheskogo instituta (Affiliate of the All-Union Correspondence Finance-Economics Institute)	ul. K. Marksa, 71
	Filial zaochnogo instituta sovetskoi torgovli (Affiliate of the Correspondence Institute of Soviet Trade)	ul. Pushkina, 11
274. Votkinsk	Filial vechernego fakul'teta Izhevskogo mekhanicheskogo instituta (Affiliate of the Evening Faculty of the Izhevsk Mechanical Institute)	
275. Zaporozh'e, Ukrainskoi SSR	Mashinostroitel'nyi institut (Machine Construction Institute)	ul. Zhukovskogo, 64

	Pedagogicheskii institut (Pedagogical Institute)	ul. Zhukovskogo, 66
	Farmatsevticheskii institut (Pharmaceutical Institute)	Minskaia ul., 10
	Vechernee otdelenie Dnepropetrovskogo inzhenerno-stroitel'nogo instituta (Evening Division of the Dnepropetrovsk Engineering Construction Institute)	prosp. Lenina, 176
276. Zernovoi, Rostovskoi obl.	*Azovo-Chernomorskii institut mekhanizatsii i elektrifikatsii sel'skogo khoziaistva (Azov-Black Sea Institute of the Mechanization and Electrification of Agriculture)	
277. Zhdanov	Metallurgicheskii institut (Metallurgical Institute)	ul. Apatova, 115
278. Zhitomir, Ukrainskoi SSR	Sel'skokhoziaistvennyi institut (Agricultural Institute)	
	Pedagogicheskii institut (Pedagogical Institute)	Pushkinskaia ul., 38
	Obshchetekhnicheskii zaochnyi fakul'tet Kievskogo politekhnicheskogo instituta (General-Technical Correspondence Faculty of the Kiev Polytechnical Institute)	Pushkinskaia ul., 38
279. Zlatoust, Cheliabinskoi obl.	Vecherne-zaochnyi fakul'tet Cheliabinskogo politekhnicheskogo instituta (Evening Correspondence Faculty of the Cheliabinsk Polytechnical Institute)	

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[1] Translations are by Miss Nellie Apanasewicz, Program Assistant for Slavic countries, Comparative Education Branch.

[2] Cities and towns without constituent republic (SSR) designation are generally located in the RSFSR (Russian Soviet Federated Socialist Republic). Other abbreviations are: avt. (autonomous), obl. (oblast), ASSR (Autonomous Soviet Socialist Republic) and SSR (Soviet Socialist Republic). The various geographic-administrative units (krai, oblast; autonomous oblast, and ASSR) are generally located within the RSFSR unless otherwise indicated.

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